John Cranford,
M. D.

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THE

MEDICAL AND PHYSICAL JOURNAL,

CONTAINING THE

EARLIEST INFORMATION ON SUBJECTS

OF

MEDICINE, SURGERY,
PHARMACY, CHEMISTRY,

AND

NATURAL HISTORY;

AND A

CRITICAL ANALYSIS OF ALL NEW BOOKS

IN THOSE

DEPARTMENTS OF LITERATURE.

CONDUCTED BY

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Member of the Royal College of Physicians, London; Physician to the Westminster Hospital, and to the Asylum for Female Orphans; Lecturer on the Theory and Practice of Medicine, &c.

BY

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Licentiate in Midwifery, of the Royal College of Physicians, London; of the British Lying-In-Hospital; Physician to the Infant Asylum; Fellow of the Linnean Society; and Lecturer on Midwifery.

AND BY

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Crawford

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To Dr. BATTY.

DEAR SIR,

AS you did me the favour to make a drawing of the subject of the following case, and was present at the operation, I request you will insert the annexed account of it in your very useful Journal; and though it may not give rise to many new ideas on our mode of treating such cases, it will shew to what an uncommon extent such diseases may arrive at without being particularly detrimental to the constitution, independent of the pain and distress arising from their weight. I am,

DEAR SIR,

Your obliged humble servant,

RICHARD SIMMONS.

Case of an extraordinary Enlargement of the Clitoris. By RICHARD SIMMONS, *Member of the Royal College of Surgeons, Surgeon to the British Lying-in Hospital, Brownlow Street, &c. &c.*

[With a Plate.]

ON the 28th of Feb. 1800, Catharine Talbot, a healthy looking woman, about thirty years of age, was placed under my care, in the Parochial Infirmary of St. Martin in the Fields, where she had been admitted on account of her inability to follow her usual occupation, which was that of working in the brick fields, and other laborious employments, from a swelling of great magnitude, as she described it, hanging from her body; and which, upon examination, I found to be the *clitoris* enlarged to a most enormous size, gradually increasing in bulk from its stem at the pubis. The circumference of the largest part measured fourteen inches, the circumference of the stem five inches, and the length of the tumor nine inches. Its general appearance was smooth and fleshy, and its upper surface covered with cuticle, and not redder than the skin in general; round the bottom of the tumor, and all its under

ſurface, it was very unequal, being made up of a cluſter of ſwellings of a globular form, of different ſizes, from thoſe of large grapes to the ſmalleſt; the colour of theſe were redder, ſomewhat tranſparent and ſhining, but not inflamed or painful to the touch. When the tumor was held up, a detached lobe from the right ſide hung lower than the reſt, having the ſame globular appearances at its moſt depending part. The nymphæ and labia on both ſides, eſpecially near the perineum, appeared as if taking on the ſame uncommon action with the clitoris, and felt more tender; which might ariſe from the weight and preſſure of the tumor, as they were not much enlarged.

The moſt ſingular circumſtance was, that her general health was not at all affected, her appetite was good, and ſhe menſtruated regularly; nor did this enormous maſs produce any pain except from its weight, which gave her an uneaſy ſenſation at the ſcrobiculus cordis, which was always relieved by ſuſpending the tumor, but which ſhe was either in general too careleſs to attend to, or the neceſſary ſupport too inconvenient to her to apply conſtantly.

The account ſhe gave of it was, that the part (clitoris) began to enlarge about four years ago, and without any apparent cauſe; and that it went on gradually increaſing in ſize for near three years, and that during the laſt year it had enlarged very rapidly. On queſtioning her very particularly, ſhe confeſſed having had a ſlight venereal complaint when ſhe was about twenty years of age, but has not the leaſt doubt of her having been perfectly cured of it, having ſuffered no interruption to her health in any way till the commencement of the ſwelling.

It will readily be granted that this was no common caſe; its extraordinary ſize and ſingular appearance neceſſarily rendered it an object of curioſity, and I occaſionally took ſeveral of my medical friends to examine it; many of whom had ſeen inſtances of enlarged and diſeaſed nymphæ and clitoris, but never any thing like the preſent. I ſaw no chance of relieving the poor woman without an operation; and ſhe being alſo well convinced of her conſtantly remaining a burthen to herſelf and the world without its extirpation, ſhe readily agreed to any plan I might propoſe.

I determined therefore on uſing the knife, and requeſted Dr. Batty, Mr. Ford, Mr. Blair, and Mr. Morris, to favour me with their attendance on the 26th of March, when the operation was performed in the following manner:—A circular inciſion was made round the baſe of the ſwelling near the pubis, beginning at the inferior part on the right ſide, and ending on the oppoſite ſide, and afterwards continuing the diſſection till the whole was removed. It was neceſſary to take up one veſ-

ſel

ſel on each ſide; the three veſſels of the clitoris were not materially enlarged, and were included in one ligature. The parts were dreſſed ſuperficially, and thirty drops of laudanum given her. I ſaw her again in the evening, and the laudanum was repeated; ſhe ſlept pretty well during the night, and was tolerably free from pain. On the 27th, ſome pain, tenſion and inflammation of the labia came on, accompanied with fever; ſhe took the ſaline mixture during the day, and at night the opiate was repeated. She diſcharged her urine freely. On the 28th, the tenſion and pain were increaſed; and not having had a ſtool ſince the operation, ſhe took a laxative medicine, which had effect. On the 29th, the dreſſings were removed, having been looſened by a beginning ſuppuration; ſhe paſſed the day rather better. On the 30th, the diſcharge from the ſore was conſiderably increaſed, and the pain and tenſion diminiſhed; one of the ligatures came away. From this time the ſore continued to diſcharge freely for a few days, when both the other ligatures came off, the patient feeling extremely happy at the thoughts of having got rid of a diſagreeable load, and with the proſpect of the ſore ſpeedily healing; nor were her expectations diſappointed, it gradually leſſened in ſize, and, by the 21ſt of April, was completely healed, the labia, &c. aſſuming their natural appearance. She was diſcharged the Infirmary before the end of the month.

It muſt have occurred to thoſe who have extenſive practice in midwifery, to have obſerved children born with a peculiar conformation of the clitoris; inſtances where it has appeared conſiderably elongated, and covered with a large præputium, have given riſe to miſtakes of the ſex of an infant, or have rendered it a doubt to which the child belonged. Specimens of this ſort are to be ſeen in all anatomical collections, as well as examples of extraordinary enlargements of it in adults. And hiſtories of ſuch caſes are to be met with in Riolanus, Bartholine, Schurigius, and others, ſome of whom believe the part endowed with a ſimilar power to the penis in men. It would be of importance to diſcover whether any artificial means, or exceſs of venery, was capable of increaſing its ſize; in the caſe above related I could not diſcover that at any period of its enlargement it had the power of erection, or was converted to any improper purpoſe.

It appears that an enlarged clitoris is almoſt endemial in ſome countries, particularly Egypt and Darfur, where the exciſion of it is very commonly practiſed, and the operation is performed a little before the period of puberty, or at about the age of eight or nine years. This cuſtom is mentioned by Strabo, and alſo by Albucaſis, in his 7th chapter, who obſerves,

that every parent knows when a child has these parts longer than ordinary, and cut and burn them off while girls are very young. De Graaf was also acquainted with this, and gives his approbation of the operation as highly necessary as well as decent, "Estque hujus partis chirurgia orientalibus tam necessaria quam decora." And Mr. Brown, our countryman, the celebrated traveller into Africa, tells us, that thirteen or fourteen young females underwent the operation in a house where he was. It was performed by a woman, and some of them complained much of the pain both at and after it. They were prevented from locomotion, but permitted to eat meat; the parts were washed every twelve hours with warm water, which profuse suppuration rendered necessary; at the end of eight days the greater part were in a condition to walk, and liberated from their confinement; three or four of them remained under restraint till the thirteenth day. The reflection that naturally arises from this fact is, that there is no hazard in performing the operation at a very early period; and the success attending the extirpation of the prodigious one in the case I have related, is a sufficient evidence of the safety of an operation at a more advanced stage of the disease,

EXPLANATION of the PLATE.

Fig. 1. The upper side of the tumor. Fig. 2. The under part.

The weight of the tumor after extirpation was twenty-eight ounces.

To Dr. BATTY.

DEAR SIR,

I Conceive that your valuable Journal serves, among other useful purposes, as a Court of Honour, to which any Member of the Faculty may appeal, respecting the misconduct of another. Allow me, therefore, through this channel, to point out to the censure of all professional gentlemen, a very unusual species of attack, which has been made upon me in a late publication.

The book to which I allude, is an Essay on *Phlegmatia Dolens*, written by Dr. Hull, of this place; in the course of which he has undertaken to controvert my Essay *On a Disease of the Lymphatic Vessels, hitherto misunderstood*, which was inserted in the third volume of my Medical Histories and Reflections. The works of every author are open to criticism, and I have never betrayed impatience when objections have been fairly and candidly

Fig 1

An extraordinary enlargement of the Uterus

Fig 2

Dr D. Batty

Engraved by W. Skelton

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candidly made againſt any part of mine. The public opinion concerning my writings is already formed; and it would have given me no concern, that they were diſapproved by pedants without learning, and compilers without diſcernment. But the offence which I mean to denounce is of a moſt ſerious nature.

In my Eſſay, which was publiſhed in 1798, I had introduced an account of the caſe of Jane Waters, a home-patient of the Mancheſter Infirmary, who had been recently under my care, and I mentioned that it was an accurate ſtatement. I have lately ſeen with aſtoniſhment, in the Eſſay on *Phlegmatia Dolens*, that Dr. Hull, who has no connection with the Infirmary, or intercourſe with me, *has called upon this woman*, for the purpoſe of correcting my account of her caſe! And that, from the confuſed recollection of this poor ignorant creature, at the diſtance of *nearly two years* from the occurrence of the diſeaſe, he has had the preſumption to publiſh a ſtatement of her complaint, contradicting mine in ſeveral important particulars! With a man who ſhows a total diſregard of profeſſional character, by the avowal of ſuch conduct, I cannot ſtoop to a controverſy. — Give me leave to addreſs ſome ſhort obſervations to your readers.

My reports of this caſe, as of many others, were drawn from notes which I took at every viſit I paid to the patient. — They ſhew the regular progreſs to a cure of the lymphatic inflammation, from the 3d to the 9th of January, 1798; and of an inflammatory affection of the knee, which was excited by her imprudent exertions, about the 16th of that month. My report, on the 21ſt of January, runs thus: "The affection of the limb is completely removed. She has no complaint, excepting debility, and a cough, which ſhe had contracted previouſly to her lying-in." On referring to the liſt of home-patients,* I find that Jane Waters was made an out-patient on the 27th of the ſame month.† In oppoſition to theſe facts, Dr. Hull has produced a narrative without ſome eſſential dates, and, I am ſorry to ſay, without probability.—Whatever ſubſequent diſeaſe the patient might experience, the evidence of the home-patient-

* In this liſt, which is kept in ſeparate books by the phyſician's clerk, are ſpecified the name and age of the patients, the place of their abode, the name of the diſeaſe, the names of the recommender, the number of viſits, which are diſtinguiſhed as they are made by the phyſician or the clerk, and the time and manner of diſcharging the patients.— The value of theſe records has been often felt.

† Home-patients of the Mancheſter Infirmary are thoſe who are attended at their own houſes.—Out-patients are thoſe who are able to come for their medicines to the Diſpenſary on ſtated days, as in ſimilar inſtitutions.

patient-book muſt prove, that ſhe was able to walk abroad on the 27th of January, 1798.

I ſhall take this opportunity of obſerving, that I have received ſome very important facts reſpecting lymphatic inflammation, from ſeveral reſpectable practitioners, ſince the publication of my third volume.—Theſe ſhall be laid before the public as ſoon as my profeſſional avocations will permit.—They will confirm two points of my Eſſay, in which I have made an addition to the hiſtory of the diſeaſe: 1ſt. In obſerving the inflamed and enlarged ſtate of the trunks of the lymphatic veſſels; 2d. In ſhewing that it may take place in either ſex, conſequently independent of the circumſtances of parturition.—Mr. Trye's book, which has been mentioned as the ſource of my opinion, I have never read. I underſtood, however, at the time of publiſhing my obſervations, that he confined his views entirely to the diſeaſe in the puerperal ſtate. But it muſt appear to every candid perſon, that by diſcovering the actual enlargement, and inflammation of the lymphatic trunks, in this diſeaſe, I have eſtabliſhed that as a theory, which was before only a plauſible hypotheſis. I derived my opinion from the evidence of my ſenſes, without obligation to any preceding writer, and my method of cure was directly deduced from that opinion.

It is with great reluctance that I thus come forward in my own vindication.—If it ſhall appear from this narrative, that the author of whom I complain has covered himſelf with diſgrace in the eyes of every man of honour, by his attempt to injure me, the fault is not mine. I am,

DEAR SIR,

Manchester,
Dec. 6, 1800.

Your faithful and obedient ſervant,
JOHN FERRIAR.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

AS the inoculation of the Cow-pox is known to be conducted upon a very extenſive ſcale at the Inoculation Hoſpital, and as the advantages which this new practice poſſeſſes are only to be learned from experience, I have hitherto judged it proper, from time to time, to furniſh the public, not only with the general reſults, but with moſt of the principal facts that have occurred to me in the propagation of this diſeaſe.—It appears, from

from my laſt publication on this ſubject, written about ſix months ago, that the number of perſons who had then received the vaccine infection at the Hoſpital exceeded 2500; ſince that time upwards of 1500 have been inoculated for the Cow-pox at the ſame place, and of theſe I have a report to preſent ſimilar to that ſtated by me in July laſt, viz. "With none of the patients did the infection occaſion a ſevere diſorder, or excite one alarming ſymptom."—The number of puſtular caſes under the Vaccine Inoculation, in the Hoſpital, has been even leſs than three or four out of an hundred, the proportion in which ſuch caſes were ſtated to occur at the period above mentioned. Reſpecting thoſe to whom I have communicated the infection out of the Hoſpital, or among my private patients, I have not yet met with one inſtance in which variolous-like puſtules took place. Indeed, I am convinced an eruption of that appearance will be found to be a very rare occurrence, unleſs, previouſly to the Vaccine Inoculation, or during its local progreſs, the patient has been expoſed to the action of variolous matter. Though ſuch an expoſure may not have been known, nor even ſuſpected to have taken place, yet this will not be deemed an objection of much weight againſt the opinion here advanced, when it is conſidered that the ſame obſervation will apply to four-fifths of all who caſually receive the Small-pox.—If a perſon who has been expoſed to the contagion of the Small-pox, for four or five days, be then inoculated for this diſeaſe, the inoculation anticipates, or prevents, the effects of the contagion, and the inoculated Small-pox is produced. But, if the Vaccine Inoculation be employed in a caſe thus circumſtanced, the Small-pox is not prevented, although the tumour produced by the inoculation advance to maturation. Hence we are to expect that the caſual Small-pox will more often ſupervene to the vaccine than to the variolous inoculation.

It was not before the commencement of the preſent year that I aſcertained the Cow-pox had not the power of ſuperceding the Small-pox; for though, from the firſt trials I made of the new inoculation, it appeared that theſe diſeaſes, as produced in the ſame ſubject from inoculation, did not interrupt the progreſs of each other, yet as the caſual does not act in the ſame manner as the inoculated Small-pox, and may be anticipated by the latter, I thought it ſtill probable that the Cow-pock infection might have a ſimilar effect. Numerous facts have, however, proved this opinion to be unfounded, and that the variolous effluvia, even after the Vaccine Inoculation has made a conſiderable progreſs, have, in ſeveral inſtances, occaſioned an eruption reſembling that of the Small-pox. This

latter

latter effect of the Small-pox I did not conceive to be poſſible, till after I had made repeated trials of the new inoculation out of the Hoſpital; nor is the fact to be eaſily explained, when it is conſidered that the vaccine inoculation imparts its effects to the conſtitution in a ſhorter time than the latent period of variolous infection, which is commonly from the eleventh till the fourteenth day.

In thoſe caſes of Vaccine Inoculation in which the variolous infection has an early effect, I have obſerved that the tumour at the inoculated part proceeds ſlowly, and never exhibits any efflorescence; the puſtules alſo are more numerous, when they appear early in the diſeaſe, than when they do not appear till after the twelfth day of the inoculation.

From the preceding obſervations we may infer, that in this metropolis, and its vicinity, where the Small-pox conſtantly more or leſs prevails, the Vaccine Inoculation muſt ſometimes be attended with a puſtular eruption, of which it is not the cauſe. But inoculators, not adverting to this, have generally aſcribed the eruption to a variolated ſtate of the Cow-pock matter, with which the patient was inoculated; and the Inoculation Hoſpital has been commonly repreſented as the place in which this adulterated matter was generated and obtained. To refute this opinion I adduced ſeveral facts, proving that varioliform puſtules had frequently accompanied the Cow-pock inoculation, though no doubt could be entertained of the genuineneſs or purity of the vaccine matter employed for the inoculation; and alſo a number of experiments, ſufficient to ſhew that the Cow-pox does not *hybridiſe* with the Small-pox, but that both diſeaſes continue diſtinct in the ſame patient; of which the following ſingular inſtance may be conſidered as an additional proof.

About two months ago, a girl, eleven years of age, was admitted into the Inoculation Hoſpital, where ſhe was inoculated with vaccine matter; five days afterwards ſhe was ſeized with the ſymptoms of Small-pox, and an eruption of puſtules (about 200) took place. On the 10th day of the inoculation, one of the variolous puſtules appeared diſtinctly within the margin of the vaccine tumour. I charged a lancet with matter taken from the centre of the tumour, and with it inoculated a child, in whom it produced a regular caſe of Cow-pox. Mr. Wachſel, the apothecary to the Hoſpital, who inoculated three children with matter taken from the puſtule in the vaccine tumour, found that it communicated the Small-pox to all of them.

Ely Place, Dec. 1800. WILLIAM WOODVILLE.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IT has always appeared to me, that the publication of caſes, however important or authentic, ſhould be reſtricted to ſuch as tend to explain ſome remarkable fact, or determine ſome point of doctrine that is not perfectly ſettled. One of your correſpondents has lately advanced an opinion, that all diſtortions in the legs or feet, by whatever cauſe produced, *or how formidable soever they may appear*, may be perfectly cured by the application of one inſtrument. If this was ſo, it would materially ſhorten my labour in the communications I propoſe to ſubmit to you upon this ſubject, as I ſhould be authoriſed to conclude, that all diſtortions of the feet might certainly be cured by the very ſame means that were uſed to cure the patient whoſe caſe I related in my laſt; and by producing the ſpecific, put an end to all farther enquiry on the ſubject. But, as not one particle of the opinion, ſo confidently given, is true, I hope I ſhall be excuſed for ſending the hiſtory of another caſe of the ſame diſeaſe; by comparing which, with that you have already publiſhed, your readers will be competent to decide upon the truth and probability of that opinion.

There is another claſs of diſeaſes that is, in ſome reſpects, ſimilar to the above, viz. what are called contractions of the limbs, the conſequences of palſy, and other diſeaſes; as many of theſe may be cured by a ſkilful application of the ſame means that I have uſed in the cure of other diſtortions, I ſhall, in my next, relate a ſingular caſe of this deſcription, and then proceed to examine the theories that have been held, and the practice that has been founded on them, in attempting to cure theſe diſeaſes, and conclude with a full expoſition of my own.

I am, GENTLEMEN,

No. 50, *Strand*, *December* 16, 1800.

Your moſt obedient ſervant,
T. SHELDRAKE.

P. S. Permit me to ſay, I ſhall ſend no anſwer to your correſpondent, Mr. Watt; for he has deſcended from diſcuſſing the ſubject in diſpute to *perſonal abuſe, and is*, THEREFORE, *fallen too low for me to notice.*

CASE II.

Sept. 7, 1798. A nephew of Mr. Duryer, No. 16, Dean Street, Holborn, was placed under my care for the cure of one

 diſtorted

distorted foot; it happened before the birth; and from that period to the time I saw him, many unsuccessful attempts were made to relieve him. He was, at this period, seven years old; the toes were of the natural form, but the whole metatarsus was distorted at its junction with the tarsus, and the foot was so twisted from its natural position, that the toes pointed directly towards the opposite leg, and he stood upon a callosity which had been formed on the outside of the foot, upon the exterior cuneiform bone; the sole of the foot was exposed to view as he stood, and the whole foot was perfectly rigid, and the leg much wasted.

In four months the foot was so much altered, that it might be placed in its natural position while he stood upon it, but it was incapable of any voluntary motion; when he endeavoured to walk, it hung an useless appendage to the leg, and immediately fell into its original position.

In eight months more the foot was so far reduced to the natural state, that he could walk upon it for a short time in the natural way; but as it remained weak, and there was, after some time, a visible tendency to relapse, it was again bound up, and continued so for ten months more, when the bandages were laid aside; and as, after six weeks trial, there appeared no tendency to relapse, I finally took my leave of the patient.

It would be very easy to say, in few words, that this patient was completely cured; and those, at least, who should see him walk flat upon this foot, and at the same time remember the state it was in, would not dispute the assertion; but as I think an accurate statement of the facts will be more satisfactory, I trust I shall be permitted to explain them.

I have one cast taken from the foot in its originally diseased state; a second, taken when it could be placed in the natural position, but remained flaccid and powerless, and therefore useless; a third, taken at the time he began to use the foot in the natural way; and a fourth, when I took my leave of him. By the assistance of these casts, instead of referring to my own memory, or that of the child's friends, the one of which might be thought partial, and the other could not show correctly what that disease was, which no longer exists, I am enabled to lay it before the reader in the most authentic and incontrovertible manner, by annexing correct drawings of the disease in its original, and the foot in its amended state. The plate marked 3, contains four views of the diseased foot; Fig. 1, is a front view of the leg, to show how the foot was turned upwards and inwards with respect to it; Fig. 2, a back view of the leg for the same purpose; Fig. 3, a view of the outside of the leg, in which no part of the metatarsus appears, because it is turned directly

directly inwards; and Fig. 4, is an inside view of the leg, to shew the position of the toes in that point of view.

Whoever is acquainted with the structure and natural position of the bones of the foot, will perceive immediately upon inspecting these views, that there was no distortion of the bones of the metatarsus, individually, or with respect to each other, but that the metatarsus began to form an acute angle, turning directly inwards at its junction with the cuneiform bones: In these again, there appears to have been little distortion, either with regard to their mutual connection, or their connection with the astragalus; but the astragalus itself was so far removed from its natural situation, that instead of its circular head lying in the scaphoid cavity of the tibia, it lay in a direct perpendicular line with the fore part of the leg: the os calcis, instead of being placed upon the ground, lay in contact with the back part of the tibia; and the scaphoid cavity of this bone rested upon those parts of the tarsus and the astragalus, by which they were joined together: the result of this combination was, that the patient stood, and could only walk upon a callosity which was formed upon the outermost cuneiform bone. Add to this, that the distortion took place before the birth, and by remaining in this state till the patient was seven years old, the whole mass was so firmly connected, as to be perfectly rigid, and no part of it seemed endowed with any capacity for locomotion: an attention to these circumstances will be necessary, when we come to consider the treatment. Plate 4, contains four views of the leg, taken from the cast which was made after I quitted the patient. In making these views, I placed the leg in the same positions as in drawing the figures, with corresponding numbers in the former plate; of course, a comparison of the two plates will shew exactly the difference between the foot in its diseased, and in its amended state.

I have only taken the extremes of this case, as the best method of shewing the full effect of the alteration produced; it would be needless to give drawings of the intermediate casts of the foot, though it may be proper to observe, that in the second state of the case, when the foot could be placed in the natural position, but had no power to retain itself in it, it fell nearly into the form of the original disease, but the skin remained loose, and was universally wrinkled; in the third state, it approached nearer to the natural form, but still it had some distinguishing peculiarities; the instep was much higher, the shape of the ancles was not so well defined, and there was much loose skin about the ancle and outside of the foot; this afterwards disappeared; and when the last cast was taken, the foot measured five-eights of an inch more in length than

it did when the one before it was made. As this is more than can be accounted for from the natural growth of a natural formed foot in the space of ten months, the surplus must be attributed to the alteration produced in the general state of the foot during the progress of the cure.

I have hinted that this foot cannot be said with propriety, to be *perfectly* restored to its natural state. If Fig. 2 and 3, in Pl. 4, are examined, it will be seen that that part of the fibula which forms the outer ancle, is removed from its natural situation, and is quite close to the tendo achillis; though this peculiarity does not render the foot unserviceable, it certainly will never occasion the leg to be admired for its beauty, and in this case I believe it to have been irremediable, though I have succeeded in removing that, as well as every other defect in younger patients. I believe it must have happened in the following way.

The fibula, from its length and position on the side of the astragalus, guards the joints so securely from luxation outwards, that Mr. Pott said, it was an invariable rule that this joint could not be so luxated without fracture of the fibula; perhaps he may be right: but it is certain that in this and similar cases, where the distortion takes place while the bones are in a cartilaginous state, the head of the astragalus, by pushing forwards, first drives the fibula outwards, and then forces it backwards towards the tendo achillis. To render the cure in this kind of case perfect, it ought to be undertaken while the bone is in a cartilaginous state; in this state I have several times cured it entirely: but in the case I have just related, I could not succeed in removing that particular defect, though it may not hereafter, in other cases perhaps, prove irremediable.

Remarks on the external Use of cold Water in Fever; *by* T. Garnett, M. D. Professor of Natural Philosophy and Chemistry in the Royal Institution of Great Britain.

No greater improvement has lately taken place in medicine than in the treatment of Fevers, by the external use of cold water; a mode which was first, I believe, practised by Dr. Wright, but since elucidated by the acute reasoning and confirmed by the experience of Dr. Currie. I have several times witnessed, not without some degree of astonishment, the wonderful efficacy of this plan; and I only presume to state a few facts, with a view of drawing the attention of the faculty in this

this city to this point; for, though the plan is used by some very judicious practitioners, it is by no means general. I am, however, convinced from experience, that there are few cases of *typhus* in which the pulse exceeds 100, where the skin is dry, and its heat considerably above the natural heat of the human blood, (circumstances which ought to be diligently attended to) where a cure may not speedily be effected by it, provided it be employed within the first six or eight days from the attack of the fever. Among many other cases, I shall only give the following:

I was desired to visit Mr. T. a respectable manufacturer in Glasgow, who laboured under a mild kind of typhus, from which, however, he did not recover so quickly as was expected. It was on the twentieth day of the fever that I saw him, and I prescribed for him the oxymuriat of potash, a remedy which I have been in the habit of using in this complaint for some years with great success. He grew better daily; but before he was perfectly recovered, Mrs. T. who had given him almost constant attention, was attacked with symptoms of fever; I did not see her till the third day after the attack, when I found her pulse not less than 130; the heat of her skin 106°, without any moisture; her eyes had a considerable degree of wildness, and her tongue was quite brown and parched. In short, I think I had never seen the disease at the same period attended with worse symptoms.

As this seemed a case exactly adapted to the plan laid down by Dr. Currie, I proposed it to the surgeon who attended her along with me, a very intelligent practitioner, who immediately assented to it. She was directed to be taken out of bed, and placed in a large tub on a stool, and a large bucket of cold water, in which about a pound of common salt had been dissolved, was thrown upon her; her skin was immediately wiped dry, and she was put to bed. In about ten minutes afterwards I went into the room, and found the pulse 94; the heat of the skin 96°. On asking her how she felt herself, she replied, as well as ever she was in her life: I left her, directing the affusion to be had recourse to again if the febrile symptoms returned during the night. I saw her the next morning, and found her without any fever, of which she had no return.

Another patient on whom I tried this remedy, was Miss R. aged 17. She had taken the infection from her brother, who had recovered very slowly from a typhus of the worst kind. She was attacked with shivering, succeeded by great heat, and pain in the back; her pulse was 128; the heat of the skin 102°, and dry; her tongue parched and brown, though not quite so bad as in the former case. The cold water was used

in

in the same manner, and in a quarter of an hour the febrile symptoms had vanished; the pulse was under 100, and the heat of the skin natural. The febrile symptoms, however, returned in about six hours, but went off on repeating the affusion; they returned again in the course of the next day, but were again overcome; she was obliged to use the affusion five times; but at last, after forty-eight hours from the first affusion, the complaint had totally left her.

Two days after this, another brother of Miss R's was seized with symptoms of fever, in which the heat of the skin, pulse, and tongue, were much the same as in his sister's case; and he was delirious, constantly wishing to go to the grammar school to receive a prize to which he was entitled. The affusion was used in the same manner as in the preceding cases; the febrile symptoms immediately vanished—the delirium left him—his pulse and heat became natural—he fell into a sound sleep—perspired profusely; and in the morning found himself so well, that I am pretty sure he did go to the grammar school to claim his prize.

Royal Institution, Dec. 1, 1800.

Account of Diseases in an Eastern District of London, from the 20th of October to the 20th of November, 1800.

ACUTE DISEASES.		Hypochondriasis	7
Typhus	25	Hemiplegia	2
Peripneumonia Notha	8	Cephalalgia	7
Dysentery	7	Vertigo	5
Cynanche Tonsillaris	5	Epilepsy	3
CHRONIC DISEASES.		Herpes	14
Cough	25	Lumbago	2
Dyspnœa	10	Chronic Rheumatism	15
Cough with Dyspnœa	12	PUERPERAL DISEASES.	
Hydrothorax	5	Low Puerperal Fever	5
Hæmoptysis	3	Abscessus Mammæ	1
Pleurodyne	2	Rhagas Papillæ	3
Diarrhœa	15	Ischuria Vesicalis	1
Enterodynia	5	INFANTILE DISEASES.	
Chlorosis	4	Dentition	3
Amenorrhœa	12	Diarrhœa	7
Hysteria	3	Convulsio	2

The present reigning epidemic is a fever of the typhoid kind, which has proved highly alarming in its symptoms, and frequently fatal in its termination. Several medical practitioners, by an assiduous attention to the sick, have become infected by it; and whilst attempting

attempting to relieve the diſtreſſes of others, have fallen victims to the diſeaſe. In ſome inſtances this fever has proceeded very rapidly to a fatal criſis, whilſt in others its progreſs has been more ſlow. It has generally commenced with chilline ſs and laſſitude, to which have ſucceeded an increaſed degree of heat, quickneſs of pulſe, and great proſtration of ſtrength. Giddineſs has very frequently occurred, and this has been the firſt ſymptom which has occaſioned any alarm to the patient or his friends. This fever has generally been attended with great determination to the head, indicated by a flushed countenance, ferrety eye, a conſiderable degree of pain, and in ſome inſtances by very early delirium. In one of the caſes that occurred to the reporter, the delirium did not occur till a late period, when it proved to be of the moſt active and furious kind, and rendered abortive every attempt to remove the diſeaſe.

Several inſtances have occurred of that ſpecies of ſore throat which has been denominated Cynanche Tonſillaris. In this diſeaſe, beſide other febrile ſymptoms, there is an inflammation of different parts of the fauces, but particularly of the tonſils and uvula. Theſe parts become red and tumid, by which a painful deglutition is occaſioned, ſometimes accompanied with a pain ſhooting to the ear. In one of the caſes referred to, there was an unuſually large ſecretion of mucus, the diſcharge of which from the mouth occaſioned conſiderable fatigue and inconvenience to the patient. By purſuing the antiphlogiſtic plan, with moderately aſtringent applications to the inflamed parts, and the application of rubefacients to the neck, the diſeaſe was gradually ſubdued.

Account of Diſeaſes in an Eaſtern Diſtrict of London, from the 20th of November to the 20th of December, 1800.

	No. of Caſes.
ACUTE DISEASES.	
Typhus	15
Sore Throat	3
Peripneumony	2
Dyſenteria	1
Small Pox	3
CHRONIC DISEASES.	
Cough	18
Cough with Dyſpnœa	17
Dyſpnœa	12
Hæmoptyſis	3
Catarrh	7
Phthiſis Pulmonalis	4
Gaſtrodynia	8
Hæmatemeſis	1
Dyſpepſia	7
Diarrhœa	10
Enterodynia	4
Colica	2
Epilepſia	2
Hyſteria	6
Apoplexy	1
Hemiplegia	2
Hypochondriaſis	3
Chloroſis	5
Fluor Albus	8
Amenorrhœa	7
Chronic Eruptions	15
Lumbago	2
Chronic Rheumatiſm	20
PUERPERAL DISEASES.	
Ephemera	4
Milk Fever	2
Menorrhagia Lochialis	3
Maſtodynia	7
INFANTILE DISEASES.	
Aphthæ	3
Convulſio	4
Ophthalmia	2
Ophthalmia Purulenta	4

The

The fever, which a few weeks ago was considered as the prevailing epidemic, though the violence of its symptoms has abated, still continues to engage the attention of medical men. Violent affections of the head, the symptom by which it was particularly characterized at its first appearance, occur less frequently; but the inflammation and slight ulcerations of the throat, which were taken notice of in the last report, still continue very frequently to attend the other symptoms.

We have now entered upon that season of the year in which affections of the lungs form a very considerable proportion in a list of diseases. Cough and dyspnœa, inflammation of the lungs, hæmoptysis and catarrh, are perpetually requiring medical assistance.

These complaints, it is well known, prove troublesome and tedious, and, in constitutions which are subject to them, very frequently continue in a greater or less degree of aggravation through the winter. An early attention to the symptoms of these complaints might, in some instances, produce a speedy termination: but what is commonly called a cold, is considered as a disease too frequent and too slight to require any particular notice, especially amongst persons engaged in business, who consider the confinement and absence from their usual occupation, as greater evils than the disease itself: thus it is left to take its chance, till, in some patients, it degenerates into an inflammation of the lungs, and terminates in a confirmed phthisis pulmonalis.

Diseases admitted under the care of the Physicians of the Westminster Hospital, from the 22d of October to the 26th of November, 1800.

	No. of Cases.		No. of Cases.
Continued Fever	24	Hæmoptysis	1
Intermittent	1	Hysteria	3
Pleurisy	2	Itch	7
Amenorrhæa	2	Lichen	1
Anasarca	2	Lithiasis	1
Apoplexia	1	Lumbago	1
Ascites	2	Obstipatio	1
Catarrh	8	Paralysis	2
Cholera	1	Phthisis	1
Cough, &c.	14	Pleurodyne	1
Diarrhœa	3	Rheumatism	9
Dyspnœa	4	Syphilis	2
Enterodynia	2	Vertigo	2
Epilepsy	1	Vomitio	1
Erythema	1	Worms	1
Gastrodynia	1		

To

Cautions reſpecting the Inoculation of Cow-Pox, by Dr. STOKES.

To Dr. BRADLEY.

DEAR SIR,

THE diſcovery of a diſeaſe in a quadruped of a genus ſo totally diſtinct from man, which, without exciting any conſiderable diſturbance in the conſtitution, renders him inſenſible to the action of the moſt generally fatal malady to which he is ſubject, is a phænomenon which has arreſted the attention of every enlightened phyſiologiſt; and the reception which this diſcovery has met with, deſerves the attention of the metaphyſician. The common people, as far as I have obſerved, receive it with gladneſs, as it comes to them free of expence, and ſome of them have been heard to ſpeak of it as a bleſſing ſent from God. They do not expreſs any more repugnance to the inſertion of pellucid lymph from the arm of a neighbour's child into that of their own offspring, becauſe originally taken from a veſicle on the nipple of a cow, than they do to feed them with the milk or fleſh of that animal. Their minds are no longer held in ſuſpence, whether they ſhall conſent to give their child a malady which may terminate in its death, with a view to preſerve it from a diſeaſe which they ſometimes obſerve to be a very ſlight one. The inoculator can now aſſure them, that their child *will not die of inoculation*, and every new inoculation confirms to them the truth of his aſſertion. The middling claſſes, who are in the habit of being guided by the practitioners they employ, take their opinion on the ſubject, and ſometimes commiſſion them to inoculate their children "with either kind of pock." The upper claſſes, who read and ſee a variety of practitioners, judge for themſelves; and thoſe among them who are philanthropiſts and converts to the new faith, inoculate their own children and thoſe of the poor together. Mr. Fermor's pamphlet will, I doubt not, make many converts among this claſs, and I hope his example will have many followers. With regard to our medical brethren, the metaphyſicians will tell us, that we are not in general to look up for ſupport from the timidity of advancing years, and they will forbid us to be ſanguine in promiſing ourſelves the ſanction of thoſe who are paſt 70. I have, however, the pleaſure to obſerve, that Dr. Hunter, of York, in a ſpeech delivered before the Directors of the Diſpenſary in that city, recommends a general vaccine inoculation, with all the

ardor and enthuſiaſm of youth. Other veterans in medicine will, I doubt not, ſtand forward in the ſame cauſe; and ſhould we live to ſo advanced a period of life, may we prove equally alive to the benefits likely to be derived from ſome other diſcovery equally beneficial to mankind! But the moſt formidable claſs of opponents which the new inoculation has to encounter, are thoſe who calculate their future income by the quantum of expected diſeaſe; yet theſe we might ſoon make converts to the new doctrine, if we could convince them that the rapid increaſe of population would amply compenſate for the apprehended defalcation of their accuſtomed profits. But the patrons of the new inoculation need to fear no oppoſition, if in ſteadily purſuing the practice they ſtudy Nature, and guarding themſelves againſt the ſeduction of falſe theory, hold themſelves ever ready publicly to acknowledge any errors into which they may have been led by inaccurate or limited obſervation. They ought to keep up a conſtant ſucceſſion of inoculations, ſo that recent matter may be always in readineſs; but if the Small-pox ſhould break out in any family, all thoſe who have not had the diſeaſe ſhould be inſtantly inoculated with Cow-pox virus, even though labouring under other diſeaſes; the parents being at the ſame time reminded, that the Cow-pox is no preſervative againſt ſuch diſeaſes, nor even againſt Small-pox, provided the ſubject of inoculation has been expoſed to its miaſma. In ſuch caſes the inoculator ſhould make ſeveral punctures, and the patient, if convenient, ſhould be inſtantly removed to a ſituation where they may not be expoſed to the contagion of Small-pox: Additional ſecurity may be obtained by making a freſh inoculation every day till marks of infection appear. Some of the beſt writers on the ſubject, ſpeak of the difficulty of communicating the diſeaſe, and ſeem to think it a virus leſs active than that of Small-pox. My experience has led me to draw an oppoſite concluſion. My method is to introduce the lancet into the Cow-pox veſicle. In a few moments after withdrawing it, a ſmall pellucid globule appears on the cuticle, which I ſcrape off by the edge of the lancet; I then turn the lancet, and ſcrape the cuticle ſtill wet with the other edge; I then introduce the lancet between the cuticle and cutis of the left arm of the patient who is to be inoculated, holding the ſide of the lancet parallel to the arm, the arm hanging in its natural poſition, but the point of the lancet perpendicular to the horizon, that the virus may flow downwards into the minute wound, and its introduction I endeavour to facilitate by gently moving the lancet upwards and downwards. I ſometimes turn the lancet and introduce it into the ſame punctures, which are generally viſible, in children at leaſt, whoſe cuticle is ſo thin,

that

that it is difficult to introduce the lancet without ſome ſlight effuſion of blood. Theſe precautions are peculiarly neceſſary where the Small-pox has already made its appearance in the family. In two inſtances where the patients were inoculated with recent virus in the afternoon of the day on which the Small-pox broke out in another child in the family, no puſtules appeared excepting thoſe on the arm; but in Job Webſter, two months old, inoculated in both arms with virus taken on a lancet and carried a quarter of a mile, puſtules appeared on the 4th day on the lower limbs, at the ſame time that one of the punctures became elevated into a red pimple, which I ſaw on the 4th, but it was not till the 6th that I ſaw the puſtules: the inoculated puſtule was now become orbicular, with a ſlight depreſſion in the middle. On the lower limbs and the lower part of the trunk we counted ſixteen puſtules. The largeſt, which was on the right knee, was orbicular, and depreſſed, exactly as that on the arm, but rather larger, and ſurrounded by an efflorescence of very minute papillæ, ſimilar to what I have ſometimes obſerved round puſtules on the arms of Cow-pox patients. The child's mother, one of my female pupils, and Mr. Walker, ſurgeon, who is in the habit of inoculating with both Small-pox and Cow-pox, were of opinion with me, that it was a Cow-pox puſtule, and I became for a time a convert to the opinion of Dr. Woodville, that theſe puſtules were the conſequence of the action of a variolated atmoſphere. On the 7th, the puſtule on the arm meaſured in diameter 1 ½ tenth of an inch, and was ſurrounded by a very ſlight redneſs; that on the knee was 2 ½ tenth of an inch, and was of a dirty browniſh hue in the middle. There was a lenticular puſtule on the left temple, 1 ½ tenth of an inch in diameter, and two or three on the lower part of the abdomen, which were of a whitiſh hue in the middle. The reſt on the body reſembled that on the knee, excepting two on the middle of the abdomen, which appeared like variolous puſtules. The lower limbs and the inferior part of the trunk were of a redder hue than the reſt of the body, ſimilar to the appearance of the ſkin in ſcarlatina. On the eighth day, the puſtule on the arm was increaſed to two-tenths of an inch, and the ſurrounding ſkin was more inflamed. The puſtule on the knee was browner in the middle, and the ſurrounding minute puſtules larger; and more puſtules made their appearance on the upper part of the body. The point of a lancet was paſſed into the margin of the puſtule on the knee, and into ſome of the ſurrounding puſtules; but neither lymph nor pus exuded. The lancet was barely moiſtened, and being carried to the diſtance of about a hundred yards, was inſerted into the arm of a child four years old. Another lancet was intro-

duced into the puſtule on the arm, but neither lymph nor pus exuded. The moiſtened lancet was carried to the ſame diſtance, and inſerted into the arm of another child, 1 ½ year old. On the ninth, the puſtule on the arm was ſurrounded by an inflamed arcola of about an inch in diameter; that on the knee was larger, as alſo its ſurrounding minute puſtules, and more puſtules had appeared on the upper part of the body, and one or two on the face. On the tenth, the puſtule on the arm was larger, but the inflammation round it as the day before; thoſe on the limbs were rather larger, and more had appeared on the face. On the eleventh, the puſtule on the arm meaſured 3 ½ tenths of an inch, and was of a whitiſh aſh colour, and the areola was become rather paler; thoſe on the knee were covered with a yellow cruſt.

Elizabeth Titley, the child *inoculated from the puſtule on the arm* of Job Webſter, went through the Cow-pox in the uſual way. I was informed that on the ſeventh day the punctures inflamed, and I examined the arm on the eleventh; the puſtule meaſured 3 ½ tenths of an inch, and the areola 1 inch eight-tenths in diameter. On the twelfth, the greater part of the areola had nearly diſappeared, but it had extended with an irregular outline towards the axilla. The puſtule afforded pellucid lymph.

In Hannah Titley, the child *inoculated from the puſtules on the knee* of Job Webſter, I was informed the punctures became inflamed on the ninth, two days after her ſiſter's. On the eleventh, when I firſt ſaw the child, the puſtule on the arm meaſured 2 ¼ tenths of an inch, was depreſſed in the middle, and was ſurrounded by an inflamed ſpace half an inch diameter, of a deep red. Her mother obſerved, that ſhe had been hot and not well for two or three days, and that ſhe had eaten very little. In the evening a puſtule appeared on her right arm. On the twelfth, the puſtule on her right arm appeared elevated, with a ſlight depreſſion at the top, and others had appeared on all parts of her body. She took little or no food, and her pulſe was 120. On the thirteenth, the puſtule from inoculation appeared irregular, with an angular margin, with ſeveral ſmall ones round it, and more puſtules had come out. On the ſixteenth, the puſtule being opened by a needle, a pellucid lymph exuded. The puſtule and inflammation round it meaſured 1 inch 1-tenth in length. On the ſeventeenth, the puſtule was ſpread wider and longer, with an irregular margin, exactly like that of inoculated Small-pox; and on opening it with a needle, the contents were a ſtraw-coloured opaque fluid. The inflamed ſpace ſurrounding it was very narrow in proportion. The puſtules on the body were conical, rather obtuſe at the end; ſome contained pus at the extremity, and others

others were covered with a yellowiſh-brown ſcab. On the eighteenth, the child was playing out of doors.

Hence it is evident, that the puſtules on the body of Job W. were variolous, probably derived from the ſame ſource as thoſe of the patient in whom the diſeaſe broke out four days before him, and that the puſtules on his arm were pure Cow-pox, both diſeaſes going on at the ſame time; the lancet inſerted into the puſtule on the arm producing genuine Cow-pox in Elizabeth Titley, and that infected by the puſtules on the knee, Small-pox in Hannah Titley. But I am inclined to believe, that the Cow-pox inoculation modified the progreſs of the Small-pox, which inſtead of appearing on the face and boſom, broke out on the lower extremities, proceeding very gradually upwards.

I have ſeen the two diſeaſes exiſting together in three other inſtances. Mary Waſſe, of Aſtwith, 5 years old, after having juſt gone through the chicken-pox, was inoculated by her mother, a very intelligent woman, in both arms, with Cow-pox virus, taken by her huſband on a lancet, two or three days before, from a patient inoculated by a cabinet-maker about three miles diſtant, on the 24th of July. On the 6th day, one of the punctures appeared inflamed, and ſtill more ſo on the 7th, in the evening of which day ſhe complained of not being well. On the 8th ſhe had no appetite, could not walk, and was feveriſh in the afternoon; and on the 9th the Small-pox broke out in the face. During all this time the inoculated puſtule proceeded regularly, and on the 11th appeared to be at the height. The mother, from whom I received the above account, which I wrote down on the ſpot, and who had inoculated one of her children ſome years before with Small-pox, deſcribed the inoculated puſtules as being circular, lower in the middle than at the edge, and as appearing to contain a fluid of a bluiſh white. On the 14th day, the 6th day of the eruption of Small-pox, I firſt ſaw the patient. There was a degree of redneſs in the ſkin round the inoculated puſtule, ſuch as remains after Cow-pox, and the puſtule now ſecreted ſome yellow pus at the margin, as Cow-pox puſtules ſometimes do. There were no Small-pox puſtules within the limits of the faded areola. The Small-pox I was informed went through its uſual courſe, and ſome weeks after I ſaw the child perfectly recovered. The Small-pox had prevailed in the village ſome time, and I doubt not, this child had received the infection previous to the inſertion of the Cow-pox virus.

W. Drabbles of Inmanſthorpe, a year and a half old, was inoculated by Mr. Walker, ſurgeon, of this town, with Cow-pox virus, on the 6th day preceding that on which the Small-pox broke out. On the 3d day of the Cow-pox inoculation, the

the punctures appeared inflamed. I saw the child on the 8th day. They were true Cow-pox pustules, but several Small-pox pustules had made their appearance within the limits of the areola; and on the 12th day, the 8th of the Small-pox fever, the child died.

Another child of the same family was inoculated with Cow-pox virus, on the 4th day preceding that on which the Small-pox broke out, and the day before the commencement of the variolous fever. On the 3d day the punctures appeared inflamed, and on the 8th there were two Cow-pox pustules, with one of Small-pox, at the distance of half an inch from them. Mr. Walker informed me, that on the 12th day, the 11th of the Small-pox fever, the pustules looked all alike, the Cow-pox pustules not being surrounded by an areola. This patient recovered.

Hannah Drabbles, 6 years old, was inoculated with Cow-pox, on the 7th day preceding that on which the Small-pox broke out. On the 8th day, one of the punctures for the first time appeared slightly inflamed, and Mr. Walker informed me, that on the 12th, the 8th of the Small-pox fever, they all appeared exactly similar to the Small-pox pustules. This child also recovered.

The next caution I have to mention is, that all inoculators should strenuously inculcate the necessity of every patient being inspected at such periods of the disease, as may enable them to pronounce whether the patient is rendered secure from the action of Small-pox. At Ilkeston near Nottingham, two children were inoculated with Cow-pox virus. Eight weeks after they caught the Small-pox, and one of them died. Being in the neighbourhood, I extended my ride to inquire into the circumstances. Mr. Williams, the surgeon who inoculated them, carried me to the parents, from whom I learnt that the pustules rose in the course of a few days into elevated pustules, like those of distinct Small-pox, were never flat, were soon changed into a scab, and that the surrounding skin was not inflamed to more than half an inch from the base. I drew representations of convex and depressed pustules, as viewed in profile. The mother said they were like the convex, but never like the depressed. Hence it was evident, that the disease which the Cow-pox virus excited, was the crustaceous pustule described by Dr. Jenner,* and which Dr. Woodville, in his excellent Observations on the Cow-pox, has proved to afford

* Continuation of Facts and Observations relating to the Variolæ Vaccinæ, 1800, p. 35.

afford no ſecurity againſt the Small-pox. The gratification I felt at having diſcovered the cauſe of the failure could only be equalled by the ſurpriſe I experienced, at finding the new inoculation in high reputation in the village. They were all inoculated with Cow-pox. I earneſtly recommended a re-inoculation of all the caſes which had not been regularly inſpected, and whoſe appearances had not been diſtinctly recollected, leſt the popular enthuſiaſm in favour of the new inoculation ſhould be damped by future failures.

The diſcovery of the cruſtaceous Cow-pox, (or *vacciola leprosa*, as I propoſe to our Noſologiſts to have it ſtyled, diſtinguiſhing the preſervative againſt Small-pox by the appellation of *vacciola scatellata*,) will enable us to reconcile the contradictory accounts of the effects of the caſual Cow-pox in ſecuring the conſtitution againſt Small-pox, as related by Drs. Jenner and Pearſon, and the caſes publiſhed in oppoſition by Drs. Ingenhouſz and Beddoes. It is natural to ſuppoſe that, in ſome inſtances, the ulcers on the hands and arms aſſumed the cruſtaceous form; and the contradictory evidence afforded by tradition, probably prevented the earlier introduction of the practice of Cow-pox inoculation.

Whenever any patient is reported to have the Small-pox after inoculation with Cow-pox virus, the inoculator ſhould take the earlieſt opportunity of inſpecting the caſe. J. Burton, who had the Cow-pox in July, had the chicken-pox about a month ago. I am,

DEAR SIR,

Your's, &c.

Cheſterfield, Nov. 17, 1800. JONATHAN STOKES.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

FROM the communications upon the Cow-pock, a ſubject intimately connected with the intereſts of humanity, and deſervedly exciting the attention of the medical world, I think the Medical Journal has been of the greateſt utility; and it was with the greateſt pleaſure that, in the laſt number of your Journal, I read the remarks of Sir Chriſtopher Pegge of Oxford, and of Dr. Barry of Cork, upon the ſame ſubject. It appears from Sir C. Pegge's obſervations, that horſes are liable, in their heels, to the ſame diſeaſe as affects the teats of cows,

cows; from which fact, the ſuggeſtion of Dr. Jenner, concerning the occaſional origin of the diſeaſe, would ſeem to be eſtabliſhed; and perhaps further obſervations may ſhew, that other animals are not exempt from the action of this morbific matter. And Dr. Barry has rendered it probable from traditional teſtimony, that a diſeaſe affecting cows, in a ſimilar manner to the Cow-pock, and from them communicable to the human ſubject, has been known in Ireland for a long time; it would ſeem alſo, that this affection was more general and frequent, in former times, than at preſent.

Among the Iriſh, as we are told by Dr. Barry, this diſeaſe is known by the name of Shinach; a term, I preſume, of Celtic extraction, and belonging to the Galic language. And feeling the importance of etymological inquiries, when cautiouſly purſued, in illuſtrating the manners, cuſtoms and opinions of antiquity, and in reviving the primary ſignification of terms, I was induced from curioſity, and without any pretenſion to a knowledge of the Galic language, to look over in a curſory manner, ſome collections and remains of that Celtic dialect, which I found among my other books; and I was much ſurpriſed and gratified in obſerving, that it is very probable the word SHINACH is a compound Galic term expreſſive of a Cow's Teat; for from theſe collections I find, that the word SINNE, in Galic, means a teat, and the word AGH, in the ſame language, is a common term for a cow: So that it would ſeem, that SHINACH was originally written SINNEAGH; whence it will be readily admitted, by every perſon in any degree acquainted with the converſions and changes taking place in the hiſtory and progreſs of language, that in ſubſequent periods, the compound term SINNEAGH was variouſly pronounced and written, as Sinnagh, Sinnach, and Shinach. Similar inſtances to the contraction of Sinne into Sin, in the firſt member of the compound, are ſo frequent in all languages, that it is unneceſſary to cite examples of it; and the converſion of the ſoft guttural conſonant G, in the laſt member, into the hard guttural conſonant C, as well as the inſertion of the aſpirate H, in the firſt ſyllable, are changes ſo familiar and conformable to the received principles of etymology, that I ſhall dwell no longer upon them.

Theſe remarks, although avowedly more literary than practical, ſeem to me of no inconſiderable importance, as they ſhew, if juſt, that the knowledge of the exiſtence of the Cow-pock has been coeval with the language of the very early ſettlers in Ireland; and it would appear from them, that among the ancient Iriſh, in remote antiquity, this diſeaſe was not only well underſtood to affect cows, but that its influence over the human

man body was known and eſtabliſhed, as the name given it, when exhibiting itſelf in the human ſubject, was the term in the ancient language, characteriſing the part of the animal whence the diſeaſe was derived; ſo that a perſon having this diſeaſe was ſaid to have the Shinach or Cow's Teat. And this mode of transferring the names of cauſes to their effects being the moſt natural, is the moſt eaſy proceſs of the human mind in the advancement of knowledge. Many terms of every ſcience may ſerve as documents of this kind of nomenclature; but to confine ourſelves to ſimilar inſtances of diſeaſes, named either immediately from their cauſes, and from ſome reſemblance to things external, or the effects of things external to the body, we need only turn over the common ſyſtems of noſology; when we ſhall find Raphania, a diſeaſe named from its ſuppoſed connection with a plant as its cauſe. Framboeſia, another diſeaſe, named from its likeneſs to a fruit. Urticaria from its ſimilarity to the effects of a nettle, and Elephantiaſis from ſome reſemblance, either to the natural form, or to ſome diſeaſed ſtate of the members of the elephant.

Theſe remarks, which may ſeem fanciful to ſome, I ſhall not extend any farther, but ſhall leave them to be confirmed or confuted by perſons having greater opportunities of inveſtigating their truth, from a greater knowledge of the Celtic language and its dialects, or from a more frequent intercourſe with perſons uſing that language. I am,

GENTLEMEN,

Your obedient ſervant,

Norwich, Nov. 23, 1800. RICHARD LUBBOCK.

To Dr. BATTY.

MY DEAR SIR,

YOU will oblige me by inſerting the following Letter, on ſome irregularities I have obſerved in the Cow-pock, in your next Number of the Medical and Phyſical Journal. I fear that want of care in taking the vaccine matter at a proper period, and watching the inoculation through its progreſs, will bring ſome temporary diſcredit on the new inoculation in this neighbourhood. I have obſerved ſome ſuch inſtances with regret, and have heard of more; I therefore think that every effort to awaken a proper attention to this invaluable diſcovery, however feeble, may ſerve the great purpoſe of exterminating the Small-pox. That terrible diſorder is now prevailing with

uncommon ſeverity in York. Three children have lately been inoculated with Cow-pox matter, who, in a few days after, ſickened from previous infection of the Small-pox, one on the third day, another on the fourth, and the laſt on the fifth. One is dead, the other two are ſtill under the diſeaſe, but with hope of recovery. The Cow-pox veſicle formed in all, but ſoon loſt its characteriſtic appearance; its progreſs ſeemed to be arreſted at the period at which it was overtaken by the Small-pox.

I am ever your's, affectionately,

R. CAPPE.

To the EDITOR of the YORK HERALD.

SIR,

I have lately heard that in ſome inſtances perſons inoculated for the Cow-pox have immediately removed from the obſervation of the perſon who performed the operation: As ſuch want of care may lead to diſappointment and danger, I think the public ſhould be apprized of the neceſſity of attending to the progreſs of inoculation in its earlier ſtages; for it is only during the early period that the true Cow-pox can be diſtinguiſhed from an irregular effect of inoculation which does not afford ſecurity againſt the Small-pox.

I feel more ſtrongly, that the continued attention of perſons well acquainted with the true character of Cow-pox is neceſſary, from having lately watched with minute care an irregular caſe, in which on the fourth day after inoculation a puſtule aroſe; on the fifth day it became turgid and broke; yet, on the ſixth day it had not entirely diſappeared, and on the ſeventh ſome fluid might ſtill have been obtained by preſſure. The puſtule never aſſumed the true character of Cow-pox: it contained a thin, yellow, muddy fluid, like diluted pus; but, at a late period, this inoculation could not be diſtinguiſhed from that which is a known ſecurity againſt the Small-pox. This puſtule would undoubtedly have deceived an inexperienced eye; and if the deſcription of it given by the parents had been relied on, it is probable that the child would generally have been thought ſecure againſt the Small-pox. Such imaginary ſecurity would unjuſtly bring diſcredit on the operation, and might prove fatal. It is ſurpriſing that no diſappointments of this kind have yet happened; none at leaſt have been made public; though irregular caſes, probably, have fallen under the obſervation of many inoculators; and there may have been others among thoſe inſtances, in which the progreſs of the diſeaſe has not been attended to: in the latter inſtance it can

not

not be ſuppoſed that any ſubſequent care has been taken to prevent the Small-pox.

What proportion the irregular caſes may bear to the regular is not yet known. Among 115 patients under my own care, I have ſeen nine irregular caſes. I am diſpoſed to believe this proportion uncommonly great. The peculiar circumſtances in which three of them occurred, I have ſtated in your Herald of the 4th of October, with the caution they ſuggeſted.* Three others certainly aroſe from violence done to the inoculated part. Some of the remaining three might be fairly expected, ſince it is obſerved that one perſon in ſixty of all born,—ſome ſtate it as one in twenty,† is by natural conſtitution incapable of receiving the Small-pox, and is ſaid to be equally exempt from the Cow-pox.

It has been ſtated, that when inflammation appears on the inoculated part before the third day, the Cow-pox will not be produced.—This is not invariably true, though an early inflammation, from whatever cauſe it may ariſe, ſeems often to prevent abſorption of the matter, and when it does not prevent the Cow-pox aſſuming the true character, it ſometimes diſturbs the progreſs of the diſeaſe. Children have, at different periods of the inoculation, ſcratched or rubbed the inciſion:‡ if this happened when the veſicle was beginning to riſe, or if the whole ſurface of the veſicle was removed, the diſeaſe loſt its true character. When the veſicle was not entirely deſtroyed, the diſeaſe became irregular in its progreſs, an efflorescence appearing earlier than uſual. When the inciſion was much rubbed before the period at which a veſicle ſhould begin to riſe, no veſicle was formed, but an extenſive circle, of an almoſt evaneſcent purple, appeared around the inciſion, and a ſoft paſty cruſt was formed upon it.

When a veſicle was torn at a late period, it ſometimes occaſioned a ſore; but this conſequence was often prevented by applications, that coagulating the fluid, which is copiouſly diſcharged, form a complete defence againſt the air.

I may add, as being immediately connected with this part of the ſubject, that when matter is taken for inoculation, it ſhould be done in the moſt delicate manner; for if the veſicle be much injured, the eryſipelas inflammation will be rendered ſevere.—

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* Viz. Not to blend matter from two patients. Inconvenience may ariſe even from puncturing a veſicle with a lancet not perfectly cleaned from matter of another patient.

† Sauvage and Roſen von Roſenſtein.

‡ I have ſeen the danger of injury been done to the inciſion by nurſes not ſufficiently careful in gathering up a child's ſleeve.

Though the matter do not flow plentifully at firſt, on making a ſlight puncture in the veſicle, it will, in a little time, come in ſufficient quantity to inoculate many perſons. It ſeems partly ſupplied by ſecretion; for I have ſeen more matter obtained in a quarter of an hour than the veſicle could be ſuppoſed to contain. The matter flows ſlowly, as the veſicle is not one uninterrupted cell, but conſiſts of many minute cells, which have ſo imperfect a communication, that they cannot be entirely emptied by a ſingle puncture. During the formation of the veſicle, minute cells may often be ſeen ariſing ſeparately, and they ſometimes remain diſtinct on the margin. At a late period when a cruſt is formed, a ring of cluſtered cells ſometimes riſe around it, more tranſparent than the original veſicle. Theſe would probably afford matter for inoculation; for Dr Woodville lately obligingly informed me, that, at the requeſt of parents, he had twice inoculated on the thirteenth day from patients, in whom the diſeaſe was ſo far advanced, that he could only obtain a little moiſture from the margin of the ſcab; yet he was ſucceſsful. He concludes, that when the local affection is *regular*, matter for inoculation may be obtained from the fourth to the twelfth day. The knowledge of this fact may be uſeful in remote ſituations, though inoculation made with matter as ſoon as it can be obtained is moſt certain. Since this was written, I have learnt from a medical friend in London, from whom farther information on this topic may be expected, that matter taken from a vaccine puſtule on the fourteenth or fifteenth day did not produce the Cow-pox, but ſevere ulceration. As the time is not ſtrictly known when the matter aſſumes this change, it ſeems right, for the preſent, to reſtrict the taking of matter to that period, during which it has been found uniformly mild and efficient. This correſponds, in general, with the fifth, ſixth, ſeventh, and eighth days after inoculation.

From what I have ſeen, I muſt conclude that the period, at which the inflammation begins, does not ſerve invariably for diſcrimination between the regular Cow-pox and the irregular effect of inoculation, nor does the time the veſicle continues. The caſe referred to ſhows that its duration alone ought not to be relied on. But no caſe is recorded of the fluid having diſappeared within two days from a veſicle that had the true character of Cow-pox: the veſicle of the ſhorteſt duration I have ſeen laſted many days.

The character of Cow-pox can be learnt only by the eye, yet ſome difference between the true diſeaſe and the ſpurious effects of inoculation admits of deſcription.—The veſicle of the true Cow-pox has, in its early period, a milky whiteneſs; the fluid it contains is almoſt colourleſs, is as clear as water, and

and does not change into pus:* it hardens into a cruſt, or the veſicle burſting, it is diſcharged. Redneſs appears around the inoculated part in the ſpurious caſes, but the efflorescence of true Cow-pox is more yellow or ſcarlet;† and ſeems to the naked eye to lie upon the ſurface of the ſkin, in appearance not much unlike the eruption of meaſles or ſcarlet fever. In the ſpurious caſes, the redneſs is leſs inclined to yellow, is ſometimes purpliſh, and ſeems to be under the ſurface of the ſkin. In all effective inoculations there is a deep hardneſs around the veſicle, that in general begins before the efflorescence, or at the time of its appearance. A ſimilar hardneſs may be felt in the latter period of ſome irregular caſes.

The accurate attention to the riſe of the veſicle, and the appearance of the efflorescence around it, cannot be too ſtrongly enforced; for it is only on the regular appearance of the inoculation in theſe ſtages that confidence ſhould be placed for ſecurity againſt the Small-pox. Should future experience diſcover that ſome irregular effects of inoculation afford ſecurity againſt the Small-pox, yet this injunction is not too ſtrict for the preſent.

If the diſeaſe commence, as is moſt uſual, on the third day, and loſe the character of Cow-Pox within ſix days from the time of inoculation, I think it ſhould not be relied on; for in ſome inſtances Dr. Woodville inſerted matter of Small-pox on the fifth day after inoculation for the Cow-pox, and each diſeaſe had its courſe. The trial has not yet been made on the ſixth, ſeventh, or eighth days; but Mr. Loy, of Pickering, informs me, that on the ninth, tenth, and eleventh days he found the inoculation with Small-pox matter abortive. If the fact always prove ſo, it is probable that the conſtitution is ſecure on the ninth day, or it becomes ſecure after this period, within the time that the variolous matter requires for commencing its action. If the Cow-pox loſes the true character within the firſt nine days, it would, I think, be proper to ſubject the patient to a ſecond inoculation, to aſcertain his ſecurity againſt the Small-pox.

From the reſult of Dr. Woodville's experiments, and the well-known fact that the inoculated Small-pox commence about the eighth day after inciſion, it is evident, that the inoculation of Cow-pox is not a ſecurity againſt the Small-pox, when it anticipates the period of commencement of that diſeaſe only thirteen

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* Sometimes at a late period, the margin of the cruſt ſeparates, and a purulent fluid oozes out; but this does not frequently happen.

† The colour is a leſs brilliant ſcarlet in cold than in temperate weather. In cold weather it is proper to clothe the inoculated arm rather warmer than uſual.

thirteen days; and, therefore, as it is well afcertained that the infection of the Small-pox received cafually produces the difeafe about the twefth day, the inoculation of the Cow-pox ought not to be relied on for fecurity, in any inftance, in which a perfon has been previoufly expofed to the effluvia of Small-pox. If the ninth day after inoculation be the earlieft period at which the body becomes fecure through the Cow-pox, then, to give fecurity, the Cow-pox muft anticipate the period of commencement of the Small-pox by feventeen days: And a perfon inoculated with Cow-pox will be liable to injury from effluvia of Small-pox for five days. If fimilar trials be made on the fixth, feventh, and eighth days, it may be determined exactly how long after inoculation for the Cow-pox, a perfon may be injured by expofure to the Small-pox.* But as the Small-pox fometimes commence a little earlier, or a little later than the period mentioned, this time may occafionally vary. Thefe obfervations are ftated merely as fuggefting rules ufeful for the prefent: future experience will probably fhew that they need correction.

Irregularities in the courfe of inoculation is not obferved in the Cow-pox alone; inftances have fometimes occurred of irregular effects from inoculation for the Small-pox, which were erroneoufly fuppofed to afford fecurity againft future infection. I tranfcribe the following as they are related by a medical practitioner of great accuracy and high reputation:—"Laft Spring (1772) I inoculated two children in one family: on the third day there was a flight inflammation around the places of incifion; on the fifth it was confiderably increafed, and the places felt hard upon being preffed by the finger. I faw them again on the feventh or eighth day, and then the inflammation was much increafed, extending nearly to the breadth of half-a-crown. Upon my applying a gentle preffure to the inoculated places, matter iffued out of them; with which, as it iffued from the arms of both patients, I perfectly faturated a cotton thread. With this thread I inoculated nineteen perfons; every one of them had a fever, and eruptions of puftules at a proper time. But the children, from whom the matter was taken, did not ficken as was expected; and, on the eleventh day, the inflammation upon their arms was confiderably abated; and two or three days after this, there remained nothing but a dry fcab. Agreeably to the general opinion of the faculty, I told the parents, that their children were fecure from future infection of

* If thefe fpeculations may be relied on, do they not offer the ftrongeft motive to early inoculation for the Cow-pox, fince we cannot fly to that operation for fafety when the hour of danger is arrived?

of the Small-pox. They, however, inſiſted upon their being inoculated again, which was accordingly done in the arm of each.—Contrary to my expectation, their arms began again to be inflamed, and went on in the ſame manner as they had done before, till about the ninth or tenth day; when they ſickened, had a ſmart fever for three days, and then an eruption of a conſiderable number of variolous puſtules."*

If it will not intrude too far on your paper, I requeſt you to add the declaration of many eminent Phyſicians and Surgeons in London, publiſhed laſt Auguſt, as it may be unknown to ſome of your Readers. It is a very ample teſtimony to the truth of the facts which have been laid before the public in your paper. If you cannot with convenience inſert it this week, I recommend it to your attention at ſome future opportunity. I am,

SIR,

Your obedient ſervant,

York, Nov. 26, 1800. ROBERT CAPPE.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IN the following obſervations on a letter from Mr. Franks, inſerted in the laſt Number of your Journal, I hope I do not improperly or unhandſomely anticipate his promiſed communication.

As Mr. Franks ſays that, in ſpeaking of the inoculated Cow-pox and Small-pox, I have *magnified the character of one at the expence of the other*, I have carefully read again what I have written, and am, in conſcience, obliged fairly to acquit myſelf of this charge. But I will not aſſume the right of a jury; permit me to lay the facts before your readers, not indeed to juſtify myſelf, for it is probable none will care whether I am right or wrong, but becauſe Mr. Franks, without ſtating the premiſes, has hurried to a concluſion, contradictory to the general belief of the whole medical profeſſion, and oppoſed to the opinion of ſome eminent members of that body, who

* Mr. Dawſon's Paper in Tranſactions of College of Phyſicians in London, vol. 3. p. 385. See eight ſimilar caſes related by Mr. Kite in the Memoirs of the Medical Society, London.

through a ſeries of years, have made the contagion of Small-pox the ſubject of continued obſervation and enquiry.

Mr. Franks admits that the Vaccine Inoculation introduces a diſeaſe milder than the inoculated Small-pox; and he admits that the Cow-pox are not contagious: In this we are agreed. Mr. Franks himſelf acquits me of having exaggerated the merits of the Cow-pox; and moſt of your readers, I think, will acquit me of the charge of detracting from the character of the inoculated Small-pox; for, in the paragraph quoted by Mr. Franks, I have expreſſed myſelf much leſs ſtrongly than Dr. Haygarth in his Sketch of a Plan to exterminate the Small-Pox; and his opinion cannot be ſuppoſed to turn to any unfavourable bias, ſince his purpoſe was to recommend inoculation to check the ſpreading of contagion. Having lately read his works with uncommon intereſt, I have unconſciouſly fallen into expreſſions not much unlike his; the following are his words: "As far as my circle of obſervation extends, both in England and Wales, this improved method of communicating the diſtemper has manifeſtly appeared to be injurious to the poor, though eminently uſeful to the rich. It has become prejudical to the community, though human art never beſtowed ſo valuable a bleſſing as it confers on the few intelligent individuals who adopt it. It has been falſely attributed by inattentive obſervers, to the inoculated patients ſpreading the caſual infection, an event which, in a few inſtances, might inadvertently happen." In theſe words Dr. Haygarth acknowledges the fact implied in my letter; and alſo, his belief, that the inoculated Small-pox are infectious. In other parts of his works he has ſhewn, that the caſual Small-pox owe their prevalence leſs to effluvia ariſing immediately from the patient, than to contagious matter adhering to clothes and other articles in common uſe. Now, it is well known, that the matter contained in the puſtules that ariſe in the inoculated Small-pox does, in no reſpect, differ from the matter generated in the caſual diſeaſe; it muſt, therefore, in proportion to the quantity, be equally liable to be diſtributed. In general, the puſtules are not ſo numerous, and the quantity of infectious matter generated, is not ſo great in the inoculated as in the caſual Small-pox: the chance, therefore, of the diſeaſe being conveyed from one perſon to another, is leſs; but it does not vaniſh into actual ſecurity. Yet Mr. Franks, without reſerve and without proof, affirms it to be "a common prejudice, that the variolous inoculation gives origin to a contagious diſeaſe." And he denies that the Cow-pox poſſeſs any advantage over the Small-pox in this reſpect. This opinion not only contradicts general belief, and ſhould therefore not be

be lightly received; but it cannot be eſtabliſhed by any number of inſtances in which the inoculated Small-pox have not ſpread infection, ſo long as any inſtance appears, in which contagion can be traced to ſuch ſource. In examining this queſtion it ſhould not be forgotten that Dr. Haygarth has adduced deciſive proof, that the contagion of the moſt malignant caſual Small-pox may be circumſcribed, and prevented from ſpreading even to the neareſt neighbour.

If any perſon doubt whether ſociety may derive advantage from the introduction of the Cow-pox, the doubt ſhould be openly and fairly ſtated, with the facts on which it is founded. If it be ill-founded, it cannot be too quickly diſpelled; if it be well-founded, it cannot be too ſoon or too generally known. But I muſt be excuſed in thinking it unjuſtifiable to publiſh, without proof, opinions that may lead any one to diſregard or undervalue the advantages that many cautious and experienced perſons expect from the introduction of the Cow-pox.

Mr. Franks is perhaps, in general, right in the opinion, that the air is not contaminated to an injurious degree by inoculation; that probably happens only, when a confluent eruption or numerous puſtules are produced. Yet there are many other ways in which contagion may be conveyed from the ſick to thoſe who have not had the diſeaſe. Theſe facts ſuggeſted, and I am ſorry they juſtify, the expreſſions in the paragraph to which Mr. Franks objects.

If Mr. Franks's opinion be erroneous, he leads us to imagine our friends ſecure while ſurrounded by danger. A vigilant caution ſhould ever preſide over ſpeculations in affairs that nearly concern the lives of our fellow-creatures. I am,

GENTLEMEN,

With great reſpect,

Your obedient ſervant,

York, Dec. 11, 1800. ROBERT CAPPE.

Experiments and Obſervations relative to Medicinal Barks.

By Dr. W. G. MATON, F. R. S. &c.

IF it be admitted that the properties of ſubſtances differ according to the different proportions of their ingredients, (and it would ſeem that this principle muſt be admitted in medical as well as in every other natural ſcience) nothing can be more evident than that thoſe moſt allied in compoſition muſt approach moſt nearly to each other with regard to their effects. By purſuing this compariſon alſo we are moſt likely to ſucceed in aſ-

certaining on what ſpecific ingredient, or combination of ingredients, the efficacy of a particular ſubſtance depends; an enquiry which has a powerful claim to the attention of medical profeſſors, but in which, perhaps, leſs progreſs has been made than in any other connected with the healing art. Unaided indeed by the important facts revealed by modern chemiſtry, ſpeculations of this nature *could* not be very ſatisfactory; but even now that the ſtudy of phyſic has received a conſiderable ſhare of the benefits which this ſcience has conferred on the uſeful arts in general, it has ſcarcely begun to emerge from the diſgrace and obſcurity of empiricism.

The above remarks will more particularly apply to ſome of thoſe vegetable ſubſtances which are conceived to poſſeſs what is called a *tonic* property. In this diviſion of the materia medica, the Peruvian bark deſervedly holds a diſtinguiſhed place; but whether there are not other ſubſtances (ſome of them indigenous in our iſland) which may in many caſes be exhibited with equal utility, is ſtill a queſtion with many eminent members of the medical profeſſion, and muſt continue to be ſo until chemical analyſis has diſcovered the preciſe compoſition of this celebrated bark, compared with that of other vegetable productions which contend for equal reputation. Some experiments connected with ſuch an enquiry, it is my object to bring forward in the preſent paper; but they form ſo inconſiderable a part of the ſeries neceſſary to the deciſion of the important queſtions above alluded to, that I bring them forward with much heſitation, and hope that they will be regarded rather as hints to perſons who have great leiſure for the proſecution of theſe curious inveſtigations, than as an addition of much value to the ſtock of medical facts.

By no analyſis of the Peruvian bark hitherto publiſhed,* has it appeared that the principle denominated by the French chemiſts *tannin*, was diſcoverable in that ſubſtance; indeed, we do not any where find this principle referred to prior to the experiments of Seguin, which had in view the elucidation of the *rationale* of tanning, but which, like many diſcoveries at firſt connected apparently with only one particular art, may hereafter throw a new light on other ſubjects of much higher importance.† As this point did not appear to have been touched upon,

* Since the above was written, a recent number of the *Annales de Chimie* has announced that Dr. Wolfring, a phyſician of Norcop, in Sweden, has aſcertained the proportion of tannin contained in the ſeveral ſpecies of Cinchona. We are not informed, however, of the requiſite particulars relating to thoſe experiments.

† See "*Rapport au Comite de Salut public, ſur les nouveaux moyens de tanner les cuirs, propoſés par le Cit. Armand Seguin.* 3. *Brumaire, l'an* 3 *de la Rep.*" (1795.)

upon, it was the firſt which I propoſed to myſelf to inveſtigate, and the following is the reſult of my experiments with the Peruvian, Caſcarilla, Oak and Elm barks, and Gall-nuts.† Half an ounce of each, very finely powdered, was infuſed two hours in half a pound of ſpring water, care being taken to ſtir the mixture very frequently, and at the end of this time, half an ounce of a ſolution of iſinglaſs (made by diſſolving half an ounce of the latter in one pound of water) was poured into the ſtrained infuſion. It was obſervable that the liquor ſtrained from the Peruvian bark was by far the cleareſt, and that of the Caſcarilla the moſt turbid. The elm bark contained ſo large a quantity of viſcid, yellowiſh mucilage, that it was with the utmoſt difficulty the infuſion could be ſtrained, and it ſtained the paper, &c. through which it was filtered of a reddiſh brown colour; that left by the other barks was pretty eaſily waſhed off by means of pure water only, but the colour of the elm yielded only to the infuſion of galls, which effectually eradicated alſo the others. Another circumſtance proper to be mentioned was, that on a certain quantity of the infuſion of galls being accidentally poured into ſome of the infuſion of bark, the colouring matter of the latter was ſpeedily precipitated, and formed a pinkiſh cloud at the bottom of the veſſel; a ſimilar effect was produced on the infuſion of Caſcarilla, but not on the other infuſions.—No change being produced on half an ounce of the liquor of the Peruvian bark by half an ounce of the ſolution of iſinglaſs, the quantity of the former was doubled; in a few minutes a very ſlight flocculent appearance was perceivable, which however, during half an hour, did not form more than a cloud. Another half ounce of the infuſion was added, but at the end of forty hours the precipitate was ſcanty, and weighed only a quarter of a grain. When dry, this precipitate became tough, ſomewhat tranſparent, and of the colour of carmine.—2. One ounce of the infuſion of Caſcarilla was not affected by the ſolution of iſinglaſs; but ſoon after another half ounce had been added thin flocculi collected pretty faſt, yet it was not until forty hours had elapſed that the precipitate could be collected, and it was then pretty compact, brown, and weighed 1 ¾ grain.—3. Equal quantities (half an ounce) of the infuſion of oak and ſolution of iſinglaſs yielded a precipitate immediately, the mixture having firſt aſſumed a curdled appear-

† Great pains were taken to procure the beſt kinds of theſe ſeveral ſubſtances; the Peruvian bark which I employed was the red ſort, and obtained, as well as the Caſcarilla, at Apothecaries Hall.

ance, which was found to conſiſt of an infinite number of fine flocculi coagulating quickly, and in a moſt beautiful manner, into a dark brown ſediment. I could not doubt that, at leaſt with reſpect to this bark, I had obtained the neutralized tannin of Seguin, whoſe deſcription of the precipitate which he had procured from the ſame bark, correſponded exactly with mine. The precipitate did not adhere to the fingers even when moiſt, but was readily ſqueezed into a compact maſs, which became extremely hard and brittle, and of a blackiſh brown colour; it weighed when quite dry, rather more than four grains. Half a drachm of ſolution of iſinglaſs was added to the liquor poured off from the precipitate, but there was no appearance of flocculi; the iſinglaſs, at the end of forty hours, had ſunk to the bottom of the veſſel almoſt pure. — 4. The ſtrained infuſion of the elm bark exhibited a ſlight flocculency as ſoon as the liquid iſinglaſs was added. After the ſpace of forty hours, a conſiderable precipitate was formed, which, when dried, weighed ſix grains, but was not very compact, the colour reddiſh brown.—5. The infuſion of galls, after having been treated ſimilarly to that of the oak bark changed inſtantly from a light greeniſh brown to a milky white colour; the mixture was now nearly taſteleſs. At length a white precipitate was formed, which, when weighed, was found to amount to the quantity of eleven grains and a half, and had become a very hard but friable maſs. To the liquor poured from this precipitate I added half an ounce more of the ſolution of iſinglaſs. The mixture aſſumed the appearance of whey, and yielded another precipitate, not ſo ſtrongly formed as the firſt, but weighing five grains and a half, and its colour was more inclined to yellow. Half a drachm of ſolution being added to this laſt liquor, and the whole quantity allowed to ſtand forty hours, nothing but iſinglaſs was to be ſeen at the bottom of the veſſel, and the liquor had begun to be more of a green colour, which gradually deepened towards the ſurface. The laſt mentioned circumſtance was obſervable with reſpect alſo to the Peruvian and the Elm bark infuſions (ſtrained from the precipitates) after they had ſtood the ſame length of time.

It was now neceſſary to make an accurate examination of the above mentioned precipitates, and to aſcertain whether they were all really the combination of the gelatine with the tanning principle of the reſpective barks. But I was deſirous of diſcovering previouſly, the relations of the ſeveral infuſions to one another, with reſpect to colour, after an admixture of each with a certain quantity of a ſolution of iron; and of comparing the appearance of the infuſions which contained all the ingredients

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in ſolution, with that of the liquor from which the precipitates had been obtained; for I was not convinced that a portion of gallic acid could not have gone down with the *tannin* in conſequence of being alſo neutralized by the gelatine. This indeed was but a rough mode of aſcertaining the portion of gallic acid, but it ſeemed to be worthy of trial. Half a drachm of a ſolution of the green ſulph. of iron in diſtilled water was added to half an ounce of each of the infuſions which had formed precipitates, and to a like quantity of the ſame not deprived of their *tannin*. The colours did not prove more intenſe in the laſt mentioned infuſions than in the firſt. There was a ſtriking difference, however, in the quantity of gallic acid manifeſted by the ſeveral barks, the Oak aſſuming a deep inky purple colour, as did alſo the Peruvian; whereas the Caſcarilla was but ſlightly altered, in compariſon with the others. The elm infuſion acquired a browniſh purple tint, which was pretty deep, the galls a purple more inclined to red.

It was plain that all the barks had been infuſed long enough to evolve at leaſt a part of their gallic acid, and I was of opinion that the above experiment was not nice enough to determine whether any had gone down in the precipitates; this could be decided only by an accurate analyſis of the precipitates themſelves. That gallic acid has an affinity to animal gluten is ſufficiently evident from the memoir of Cit. Seguin, who thinks that it has its effect in the proceſs of tanning, though whether detrimental or otherwiſe he does not appear to have proved.*

Why a longer portion of time has been preſcribed for the infuſion of barks, in order to extract the gallic acid, than has been thought neceſſary for the extraction of tannin, was another point concerning which I was by no means ſatisfied, and I began to doubt whether by an infuſion of only two hours I had procured as much of the *latter* as the barks might really contain, eſpecially as ſome ſeemed to give it out to the water more ſlowly than others. It was likewiſe uncertain whether the proportion of the bark to the menſtruum was ſuch as was moſt favourable to the complete evolution of all the ſoluble parts of that ſubſtance. It appeared therefore proper to obſerve the effects of the ſolution of iſinglaſs on an infuſion of longer ſtanding than has been thought ſufficient in pharmaceutical proceſſes;† and alſo

* Mr. Biggin, who (though ſo well known before as a gentleman of talents and zeal in the proſecution of philoſophic l experiments) juſtly deſerves diſtinguiſhed mention for his examination of ſubſtances moſt advantageous in tanning, has informed me that he is convinced of the *injuriouſneſs* of this acid.

† See Lewis's *Materia Medica* (laſt edit. by Dr. Aikin) article *Cortex Peruvianus*.

alſo to try at what point of time, or by what means, the liquor might be known to hold all the *tannin* that the bark contained.

[To be continued.]

Craven Street, Nov. 20, 1800.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

I Lately tranſmitted ſome obſervations on Bronchocele, which you have done me the honour to inſert in the laſt Number of your very reſpectable Journal. I beg leave to correct an error in the formula recommended for the complaint. Inſtead of directing the maſs, containing two ounces of burnt ſponge, to be divided into forty-eight, as I ought to have done, I directed it to be divided into twenty-four. This inadvertence probably aroſe from my knowing the perfectly harmleſs nature of the remedy; and muſt be apparent to every reader, from my ſtating in another part of my paper, that every lozenge is to contain a ſcruple of the medicine.

This is the doſe I have hitherto given, and, except in one inſtance, only twice a day. I intend to increaſe the quantity to half a drachm, or more, in caſe the patient can bear it. The only difficulty ariſing from it is, that from the flavour, and its being held in the mouth till it diſſolves, naufea is excited in ſome delicate habits; ſuch as thoſe commonly are who are liable to this diſeaſe.

I am more and more convinced that the treatment of this diſorder is not well underſtood, having been informed by different medical men, ſince the publication of my former paper on this ſubject, that in the courſe of their obſervation and practice, they had known but little benefit derived from the means employed for its cure.

From a gentleman of great eminence in the profeſſion I learn, that his friend, the late Dr. Bromfield, died of this complaint; and that the tumour was opened about a week previous to his death, an operation which ſerved only to prolong a miſerable exiſtence.

In perſons rather advanced in years, the Bronchocele will not always yield to medicine; but its commencement frequently takes place early in life; and, if due attention is paid to it in time, I have reaſon to believe that it will generally prove curable. Particular care ſhould be taken that the medicine is not left

left off too ſoon; for the diſorder is of an inſidious nature, and apt to deceive thoſe who are not much accuſtomed to it. I have ſeveral times known patients leave off their medicine in this caſe, from an idea that the Bronchocele was cured; and, after a while, they have been obliged to have recourſe to it again. It is, however, poſſible that the diſpoſition only to the diſeaſe might remain, and cauſe the tumour to regenerate. Be this as it may, the effect of returning to the uſe of the lozenges has been the ſame; if properly perſevered in they have ſeldom failed to exterminate the complaint.

To theſe remarks I beg leave to ſubjoin a caution to thoſe perſons who venture to give quack medicines. A phyſician lately mentioned a caſe at a medical ſociety, in the preſence of one, at leaſt, of the Editors of this Journal, which ought to ſerve as a warning to all ranks of perſons in this age of empiriciſm.

This caſe I ſhould not have preſumed to communicate to the world, had I reaſon to believe that gentleman himſelf would publiſh it; but he gave the ſociety reaſon to conclude he had no ſuch intenſion, by ſaying, that he was not much in the habit of publiſhing. This is to be regretted in a practitioner of eminence, and eſpecially in one who has ſingular opportunities of ſeeing uncommon caſes.

Whether this averſion to appear often in print ariſes from diffidence, or want of leiſure, I pretend not to determine; but, as there are ſo many reſpectable channels open for the ready communication of uſeful caſes, I ſincerely wiſh it was in my power to prevail on other diſtinguiſhed members of the profeſſion to follow the example of a Denman; and not conſider it as any diſparagement of their dignity to publiſh a ſingle caſe, or a ſingle uſeful remark, in any vehicle of information which may be likely to fall into the hands of medical practitioners at large, and to prove beneficial to the world.

The caſe to which I now allude was one in which Dalby's Carminative, given in too large a doſe, proved fatal. The doſe, according to the nurſe's account, was a tea ſpoonful; the age of the child about a twelvemonth. Upon examination after death, the injury appeared to have been done to the brain; a remarkable degree of congeſtion appeared in every ſinus, and every veſſel of the pia mater, ſo as to leave no room to doubt that the cauſe of death was ſeated there.

This, and other caſes, where exceſſive doſes of opium have proved deſtructive, as well as one publiſhed in your Journal by Mr. Brookes, where a fatal conſequence was prevented by venæſection, ſeem to confirm the propriety of that gentleman's practice;

practice; and to ſhew that unloading the veſſels of the head is one of the chief indications of cure.

I have known Storey's worm cakes prove fatal; and, what made the caſe ſtill more affecting, they were given by a father to a child, who had never ſhewn a ſingle ſymptom of having worms.

In regard to Dalby's Carminative it is neceſſary to remark, that the phyſician who mentioned the fatal caſe, alſo related an inſtance in which it proved very pernicious to an adult; who, having been uſed to take it for a complaint of the ſtomach or bowels, ſent for a bottle to a different ſhop from that where ſhe uſed to buy it, and it proved ſo much ſtronger than what ſhe had been accuſtomed to take, that, with the able aſſiſtance of this experienced practitioner, ſhe did not recover without much difficulty. I am,

GENTLEMEN,

New Street, Hanover Square,
Nov. 11, 1800.

Your moſt humble ſervant,
JOHN RING.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

SHOULD the annexed obſervations on a branch of Midwifery merit a place in the Medical and Phyſical Journal, they are at liberty for inſertion in your next Number. I am,

GENTLEMEN,

Blackburn, Lancaſhire,
Nov. 29, 1800.

Your humble ſervant,
JAMES BARLOW.

On the Advantages and Diſadvantages of inducing premature Labour, with a View of ſuperſeding Embryulcia, the Section of the Symphyſis Pubis, and the Cæſarean Operation.

Nec Deus interſit niſi dignus vindice nodus. HORACE.

THE practice of exciting premature labour, in caſes where the pelvis is ſo much diſtorted as to render embryulcia neceſſary, has been recommended by various authors, though the exact limits preſcribed for its neceſſity have not hitherto been pointed out with that degree of preciſion which the importance of the operation demands; how far I have been able to illuſtrate the ſubject I cannot pretend to ſay: if, however, I am ſo fortunate

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as to caſt a ſingle ray of light thereon, I ſhall not conſider my time miſpent.

To enter into a detail of all the various modes of delivery in caſes of deformity of the pelvis, would far exceed the limits preſcribed to the preſent undertaking; I will therefore only make a few animadverſions on the ſubject in queſtion, and wave entering into a laboured hiſtory of the operation, nor trouble my readers with aſcertaining the exact epoch which gave riſe thereto. The various gradations of deformity incident to the female pelvis, are frequently ſuch as involve the accoucheur in ſome degree of perplexity reſpecting the beſt mode of delivery to be adopted for the ſafety of both mother and child, and various are the reſources which obſtetric knowledge indicates for that purpoſe. The cruelty inflicted upon the fœtus by the uſe of the crochet, and the danger attendant upon the mother, are reaſons of ſufficient weight for the humane accoucheur to exerciſe his utmoſt ſkill in endeavouring to point out a more eligible expedient, in caſes of diſtorted pelvis, than that of the deſtruction of the fœtus; the deformity of the pelvis then, to a certain degree, is what has been conſidered by authors as an indication for bringing on premature labour, with a view of ſaving the life of the child, and leſſening the riſque of that of the mother.

On a ſuperficial view of the ſubject, it would appear to be pregnant with but few difficulties; but, on a more minute enquiry into the attendant circumſtances, we ſhall be compelled to acknowledge that many obſtacles preſent themſelves, ſome of which appear of conſiderable cogency; whether the removal of theſe lye within the ſphere of obſtetric art, or, otherwiſe, wait the interference of the legiſlature, time alone can only determine; it is nevertheleſs incumbent on every accoucheur (before he attempts the operation) to eſtabliſh in his own mind the morality of the practice, and exert his utmoſt ſkill, by every poſſible means, to extricate the environed fœtus from impending deſtruction.

This operation, however, can ſeldom be put in practice before it has been proved, by the event of a former labour, that the pelvis was ſo much diſtorted that the life of the child muſt have been inevitably deſtroyed before delivery could be accompliſhed; and as the human pelvis is liable by diſeaſe to become contracted into various ſhapes and degrees of diſtortion, from that of a well-formed pelvis to one ſo much contracted in its different apertures, that delivery per vias naturales becomes in ſome inſtances utterly impracticable. In theſe different ſhades of diſtortion, art has furniſhed us with means of accompliſhing delivery in various ways, according to the exi-

gency of each individual deviation from the natural ſtandard; but as authors, even in the preſent improved ſtate of the art, differ in opinion on theſe important points of practice, it is to be hoped that every laudable endeavour to facilitate the difficulties attendant on parturition, will promote a free enquiry on the ſubject, and ultimately have a tendency to the general good of ſociety. To become acquainted with the fundamental principles of midwifery, and to aſcertain the exact dimenſions of the pelvis, is a matter of the greateſt moment to the accoucheur, before he determines on the operation; as want of this neceſſary knowledge made by the touch, may involve the practitioner in irretrievable injury to the fœtus. The diſtortions of the pelvis are generally induced by *rachitis* in the infantile ſtate, or by *malacoſtion* and *exoſtoſis* in the adult; it is theſe different cauſes and degrees of diſtortion which the accoucheur ſhould keep in view when making the admeaſurement per vaginam. When paſſing the finger up the vagina, and any part of the os ſacrum, or lumbar vertebræ, be perceived to project into the cavity of the pelvis, or if the rami of the iſchia, or the ſymphyſis of the os pubis, approach unuſually near each other, we may conclude that ſome degree of original mal-conformation exiſts in the bones which compoſe that aperture; yet it not unfrequently happens that the ſuperior aperture is conſiderably contracted, and the inferior cavity, or outlet, is even wider than natural: and to obtain a ſufficient idea of the ſtate of the apertures of the pelvis, in every direction, I have frequently found it neceſſary to have recourſe to the paſſing of the whole hand into the cavity of the pelvis; the three firſt fingers of which are to be conducted to the brim, where the admeaſurement may be generally aſcertained to the ſpace of a few lines, by placing them in different directions in the ſuperior ſtreight, and if, when kept cloſe together, the ſide of the fore finger touch the os pubis, and the third the projecting angle of the ſacrum, we may conclude that the ſpace betwixt the two points is manifeſtly no more than two inches, an opening through which no living mature fœtus can poſſibly be extracted alive; and when only two fingers can be placed in the ſame manner, and betwixt the two angles above-mentioned, the accoucheur may reſt ſatisfied that, except a greater ſpace can be obtained on either of the ſides where the admeaſurement is made, that no other mode of delivery, per vias naturales, can, with ſafety to the mother, be adopted than either the crotchet or Cæſarean ſection. This method of proceeding will generally furniſh the accoucheur with an accurate knowledge of the dimenſions of the pelvis, and direct him to the moſt eligible reſources in caſes of extreme deformity.

mity. In every inſtance where I have had occaſion to terminate the delivery with the crochet, it has been my conſtant practice to aſcertain the exact dimenſions in every poſſible direction, that I might be armed with every requiſite auxiliary in each ſucceeding labour.

To thoſe whoſe opportunities of practice have not furniſhed them with a ſufficient ſhare of diſcrimination by the touch per vaginam, to be enabled to aſcertain to a tolerable degree of exactity the various ſhades of diſtortion which the female pelvis is liable to, I would recommend the uſe of the *calipers*, as an inſtrument more eaſily applied, and poſſeſſing ſuperior advantages of accuracy over any other. See plate the 6th of Heath's Baudelocque; and for an account of their mode of application and utility, I will tranſcribe the 130th page from Vol. I. of that author.

"To determine how much the ſuperior ſtrait is defective in the aforeſaid diameters, and meaſure it by means of theſe compaſſes, we take the thickneſs of the woman, from the middle of the mons veneris to the centre of the depreſſion of the baſe of the ſacrum poſteriorly, by applying one of the points of the inſtrument before, againſt the ſymphyſis of the pubis; and the other behind, a little under the ſpine of the laſt lumbar vertebra; and deduct three inches from that thickneſs in women that are thin, for the baſe of the ſacrum, and the anterior extremities of the oſſa pubis; the thickneſs of theſe latter being at moſt but ſix lines, and that of the baſe of the ſacrum two inches and a half; and ſo conſtantly ſo, that I have not found a difference of a line in about five and thirty pelves, diſtorted and contracted in all manner of ways, and in all poſſible degrees.

"This ſubtraction of three inches from the external thickneſs of the pelvis, in the ſaid directions, is alſo ſufficient when the luſtineſs is moderate; and we may add one or two lines more, when it is exceſſive, becauſe the fat which forms the mons veneris, eaſily ſhrinks under the lenticular extremity of the leg of the compaſſes. The reſult of this procedure is ſo exact, that the pelvis meaſured with the common compaſſes after opening the body, was not above a line over or under my eſtimation in any one of my experiments. A greater preciſion if we could obtain it, would be uſeleſs, ſince the choice of the moſt proper methods for terminating the delivery in a given caſe, cannot depend on a line more or leſs in the diameter of the pelvis. According to theſe data, the knowledge of this diameter is eaſily obtained. It is four inches when the external thickneſs of the pelvis meaſures ſeven; it is but three when the latter only meaſures ſix; and but two when it does

not exceed five, &c. I ſuppoſe the woman to be thin, as moſt of thoſe are who have been rickety."

In conſidering the mechanical deſcent of the fœtal cranium through the pelvis, it will appear manifeſtly neceſſary that the dimenſions of the one ſhould bear ſome mathematical proportion to the other; to obviate certain difficulties, Nature has wiſely ordained a peculiarity of ſtructure to the fœtal cranium, the mechaniſm of which is ſo formed, that the head of the fœtus is leſs compact than that of the adult, and the bones more looſe and numerous, conſequently are better adapted for paſſing through the pelvis, than if they had been firmly joined together.

The growth of the fœtus alſo varies very much during the different ſtages of geſtation; the embryo increaſes more rapidly in ſize during the firſt weeks after conception, (than after it takes on the fœtal ſtate, till the end of nine months,) though this increaſe has various ſtages of irregularity, till the full period of utero geſtation. The walls of the pelvis are ſo firmly connected together, and the change which the fœtal head is conſtantly undergoing as geſtation advances, will ever remain an obſtacle to this ſpecies of delivery, owing to the uncertain magnitude and degree of reſiſtance oppoſed to the pelvis during its paſſage through that tube. Without multiplying the various poſitions which the fœtal head aſſumes during the approach of labour, it may be neceſſary to ſtate, that the general and moſt natural preſentation, is the vertex with the ears, nearly in a diagonal direction betwixt the pubis and ſacrum; the cauſe of this part of the head deſcending firſt into the pelvis, may be owing in ſome meaſure to the foramen magnum being ſituated nearer the occiput than the face, conſequently is more mechanically inclined to become firſt puſhed into the ſuperior aperture of the pelvis; ſometimes, however, the anterior fontenelle may at the commencement of labour be perceived to preſent in the axis of the ſuperior ſtrait, but this ſmall deviation is generally rectified by the repeated action of the uterus, which forces the vertex into the axis of the pelvis, whilſt the chin is bent down upon the breaſt, and the face turned into the hollow of the ſacrum. If this proceſs was not to take place, and the fontenelle was forced out of its proper direction, the labour would prove tedious, and probably might ſometimes terminate in a face preſentation. The forceps and lever are inſtruments well calculated for extracting the fœtus within certain bounds of difficulty, and claim a preference over every other invention, when uſed with a view of preſerving the lives of both mother and fœtus; and when the ſmall diameter of the ſuperior ſtrait of the pelvis offers a

ſpace

ſpace for the entrance of the head of the fœtus, equal to three inches in diameter, we may not altogether reject every hope of extracting a living mature fœtus through an aperture of the above ſpecified dimenſions, with either of theſe inſtruments; or if the child's head is ſmall, and not too firmly oſſified to elongate, and allow the bones to overlap by preſſure, and the forcible action of the uterus, we may ſometimes under theſe circumſtances meet with a favourable termination, when the diameter of the pelvis is rather under three inches. On the contrary, when the mother's pelvis is aſcertained to meaſure no more from pubis to ſacrum, or in any other of the apertures, than two inches, or two inches and a half, I am perſuaded that no mature fœtus can poſſibly be brought through a ſpace of theſe dimenſions, without deſtruction to the child; it is then in this intermediate degree of diſtortion, betwixt the poſſibility of delivery, (without injury to the mother or fœtus,) with the forceps or lever, and that ſhade of deformity which requires the application of the crotchet, where premature delivery ſeems moſt likely to become admiſſible. A queſtion then will naturally preſent itſelf to every accoucheur who deliberates on the ſubject, namely, to what degree of compreſſibility is the mature fœtal cranium capable of undergoing, without deſtruction to the child during its paſſage through the pelvis, and what analogy does it bear in computation with one of ſeven or eight months? The ſolidity of the fœtal head, and the re-action of the bones of the pelvis upon that body, are ſo variable in different children, that no exact criterion can be formed before birth; however, I will venture to riſk an opinion, that the diameter of the fœtal head, under certain ſituations, will bear a reduction in ſize by preſſure, from a quarter to half an inch, without producing much injury to the fœtus; but when the diameter of the head becomes much reduced beyond this, by either the forceps or lever, their application becomes dangerous to the child, and of courſe inadmiſſible on that ſcore. I conſider the fœtus a mere paſſive body during its paſſage through the pelvis; nevertheleſs, I am well aware that examples are not wanting, where the fœtal head has undergone a much greater reduction by compreſſure without proving fatal; however, I would have it underſtood, that what I have advanced, is what more generally takes place, and the deviations from the above rule are only exceptions therefrom. Some difference may reſult from the reduction of the volume of the cranium of a fœtus of eight, and one of nine months, as it will be generally allowed, that the bones which compoſe the cranium of the latter, will not admit of the ſame degree of reduction when compared to the former, yet, perhaps, a leſs

a leſs variation in the ſize of the head will take place betwixt the two, during their paſſage through the pelvis, than what at firſt would appear probable, owing to the greater power of action of the uterus during labour upon the body of a fœtus of nine months, than upon an immature one of ſeven or eight; and ſome difference of reſult may alſo ariſe to the fœtus from the length of time which may elapſe during the paſſage of the head through the aperture of the pelvis.

The next queſtion which occurs is, in what degree of diſtortion of the pelvis it becomes neceſſary to have recourſe to this operation? This point will not be eaſily aſcertained, even if the accoucheur was allowed to make an examination per vaginam; and as this is a matter not altogether attainable during geſtation, it becomes requiſite to ſtate the circumſcribed dimenſions of the pelvis, wherein this operation is more likely to meet with ſucceſs: I preſume then that a pelvis, the ſmall diameter of which meaſures from pubis to ſacrum about two inches or two inches and a half, appears to favour the ſucceſs of this operation more than any other dimenſions; for, on the one hand, it is ſufficiently evident that a mature fœtus cannot be born alive, when the dimenſions are under two inches and a half; and on the other, when the ſhort diameter does not exceed two inches, the crotchet becomes neceſſary; and ſhould the ſuperior aperture meaſure only one inch and a quarter in the wideſt part of its ſuperior conjugate diameter, the only reſource for the ſafety of the mother and fœtus is the Cæſarean operation.

If it is proved that this operation cannot be performed with any degree of certainty of ſucceſs to the fœtus, except where there is a ſpace to be gained in ſome part of the ſuperior aperture, from two inches to two inches and a half, then it will follow that this mode of delivery muſt be very much limited, inſomuch, that a conſiderable degree of hazard will always attend it, owing to the want of accuracy in diſcriminating betwixt the relative ſize of the fœtal head and the dimenſions of the pelvis. Having now pointed out the diameter of half an inch, as the moſt warrantable ſpace alloted for the ſucceſs of this ſpecies of operation, when performed at any time from the latter end of the ſeventh to that of the eighth month of utero geſtation, before or after which periods, I think, no one juſtifiable who induces premature labour under theſe circumſtances; nor can I altogether give credit to thoſe accounts, from whatever ſource they may have been gleaned, where it is aſſerted that premature delivery has been ſucceſsfully adopted when performed early in the ſeventh month of pregnancy, and

where

where the diameter of the pelvis meaſured not more than two inches in the wideſt part.

When this operation is had recourſe to, and the dimenſions of the pelvis are ſuch as promiſe ſucceſs, we ought to defer the attempt as near to that period fixed by Nature for the full evolution of the fœtus as circumſtances will admit, that thereby the child may acquire every poſſible advantage to enſure a healthy ſtate of exiſtence after birth. The period of eight months, or thereabouts, is the moſt advantageous time for the performance of this operation, when we conſider the precarious ſtate of a fœtus at a much earlier period; for I will venture to predict, that not one in twenty can ſurvive the birth ſo completely as to be reared, where labour is excited earlier than the ſeventh month of geſtation: no doubt, a few exceptions may be oppoſed to this general concluſion; but if we conſider the puny ſtate of theſe ſhort-lived individuals, and the miſery which their premature birth ſubjects them to, we ſhall have no cauſe to envy their ſituation; and few would prefer ſuch an ephemeral ſtate to a mere nonentity.

It is to be wiſhed, that authors who have had recourſe to this operation, had been more explicit in their accounts reſpecting the exact period of geſtation, and the premature fate of children, and how long they ſurvived that event; for it is not a ſufficient incitement to the operation, merely to bring a being into exiſtence which muſt inevitably periſh ſoon after birth. And this immature mode of delivery would conſequently be a means of ſubjecting the mother oftener to a ſtate of geſtation than if ſhe was allowed to complete the period of nine months. To obtain premature delivery, the membranes which envelope the fœtus are generally artificially ruptured prior to that event; and the time which elapſes before the uterus reſumes its expulſive efforts, are very variable, inſomuch that in ſome caſes even ſeveral days have paſſed before that organ has completed its evolution. When the waters are thus evacuated, and the fœtus left in cloſe contact with that viſcus during its repeated contractions, I am diſpoſed to conſider the life of the child, during its exit through the pelvis, involved in ſome danger, and that proportionable to the degree of diſtortion, and date of geſtation. It is not ſufficient that premature labour ſhould be indiſcriminately produced at a given period of geſtation, merely with a view of ſuperceding embryulcia, it is of more importance to look forward to the preſervation of the child; for every attempt made as early as the ſixth month of geſtation, either with the intent of avoiding embryulcia, or preſerving the life of the fœtus, will anſwer no other purpoſe than jugulare mortuos; for, as I have before obſerved, and what I wiſh further

to

to inculcate is, that every delivery excited by art, or otherwiſe caſually taking place at an earlier period of pregnancy than the ſeventh month, will generally prove deſtructive to the fœtus, either during the time of delivery, or very ſoon after that event.

The ſufficiency of augmentation of ſpace gained by the ſection of the ſymphyſis pubis in extreme deformity of the pelvis, and the manifeſt danger attending that operation, are circumſtances ſufficiently warrantable to preclude its uſe as a ſubſtitute for any of the above-mentioned modes of delivery. The Sigultian operation frequently involves the fœtus in imminent danger when the diſtortion is conſiderable; and in ſome inſtances where the ſection has been made, the conſolidation of the ſacrum and ilia have been ſo firmly united, that no adequate ſpace could be gained by a diviſion of the ſymphyſis pubis for the extraction of the child, and delivery has afterwards been obliged to be terminated by the crotchet or Cæſarean operation; and it has been doubted, and with ſufficient reaſon, whether the Sigaultian operation has ever been ſucceſsful to either mother or child, in caſes where the ſuperior aperture, from pubis to ſacrum, meaſured leſs than two inches and a half; hence will appear the inſufficiency of this operation, and the neceſſity of its being baniſhed in future from the practice of midwifery.*

It is a matter of ſome conſequence for the accoucheur to diſcriminate, in caſes of diſtortion of the pelvis, between exoſtoſis and malacoſtion, as in the latter the bones will ſometimes give way conſiderably, either by the introduction of the hand, or the impulſe of extracting the child.

Two caſes of this ſpecies of deformity have fallen under my care; in one of which, the projection of the lumbar vertebra and the connecting angle of the ſacrum were ſo much bent into the cavity of the pelvis, that on the introduction of the finger up the vagina, a protuberance preſented to the touch, very much reſembling the head of the fœtus, pretty far advanced into the pelvis; on carrying the finger a little higher up, paſt the projection, I could aſcertain the head of the child; but on moving the finger round the projecting part, the

* Amongſt the numerous evils attending the Sigaultian operation, the laceration or ſeparation of the ſacro iliac ſymphyſis is one of the moſt dangerous, and to obviate which, and at the ſame time allow a ſufficient ſeparation of the ſymphyſis pubis, appears no eaſy matter; yet, to accompliſh which, I have however thought, that if a vice could be fixed externally upon the hips of the woman, with a ſcrew ſo managed, that during the operation and ſubſequent treatment, no more ſpace ſhould be allowed to take place than what was ſufficient for the extraction of the fœtus, by which means the injury in queſtion would be in ſome meaſure obviated.

the diſtortion was ſo great, that the whole circumference, in any direction, did not exceed that of half-a-crown. This was on the 29th of April, 1792, at which time I delivered her with the crotchet, and the bones of the pelvis yielded conſiderably to the impulſe of the head of the fœtus, which acted like a wedge during the efforts of extraction; yet, notwithſtanding the pliability of the bones of the pelvis, and the debilitated ſtate of her conſtitution, ſhe recovered ſpeedily, and without interruption. On the 22d of February, 1794, I was in the neighbourhood where this poor woman reſided, and hearing of her being ſtill alive, I was led by curioſity to pay her a viſit, and if poſſible, to obtain permiſſion to examine her per vaginam, which was readily granted. I found the rami of the oſſa iſchia at their junction with the rami of the oſſa pubis overlapped each other, leaving a ſmall opening under the ſymphyſis pubis, ſufficient to admit the finger to paſs into the vagina by that paſſage, and another aperture below, but rather larger, and parallel with the tuberoſities of the oſſa iſchia. From what I have been ſince able to learn, ſhe ſurvived this period near two years, at which time ſhe was become ſo crooked, that her breaſt and knees were almoſt in contact with each other, and after her death it was with difficulty ſhe could be put into the coffin. This woman bore nine children, and died in the 39th year of her age: I attended her in the preceding labour to that above-mentioned, which caſe was lingering and tedious; however, I ſucceeded by terminating the delivery with the lever, and preſerved the life of the child. The other caſe of malacoſteon occurred to me in this town, about three years ago; the woman was in a dying ſtate before I was conſulted. On examination I found the pelvis very much diſtorted, and ſuſpecting the deformity to ariſe from a ſtate of malacoſteon, I was induced, from the circumſtances of the preceding caſe, to attempt delivery; and this more particularly, as the poor woman expreſſed an earneſt deſire to be releaſed from her preſent burthen, rather than die undelivered. On enquiry, I learned that ſhe had only juſt completed the ſeventh month of geſtation; this ſtage of prematurity induced me to attempt to turn the fœtus, and deliver by the feet, by which means I might give the child a greater chance of life; but with reſpect to the mother, there was not the leaſt proſpect of her ſurviving delivery long. The os uteri being dilated, I accordingly introduced my hand, but the apertures of the pelvis were ſo much diminiſhed in their dimenſions, that it was with conſiderable difficulty; however, I ſucceeded, and delivered the woman of living twins; ſhe died in about twelve hours after, and the children did not ſurvive their births many days. Having obtained leave

to inſpect the body afterwards, I found the dimenſions and ſtructure of the pelvis as follow: The conjugate, or antero-poſterior diameter, from the ſymphyſis pubis to the projecting angle of the ſacrum, meaſured two inches and a half; and the antero-poſterior dimenſions on each ſide of the ſacro illiac ſymphyſis, between theſe two points, were, in ſome places, a few lines more than two inches and a half; from which it is obvious, that the form of the ſuperior aperture of this pelvis had a triangular appearance. The rami iſchii approached ſo near each other, that the ſpace left betwixt them would ſcarcely admit one finger; and on the introduction of the hand, when proceeding to turn the fœtuſes, theſe bones receded from each other very conſiderably; and the ſame effects were obſervable in the ſuperior ſtrait. The ſpongy nature of the bones of this pelvis were alſo manifeſted, by having very little cretaceous matter in their ſubſtance, and their texture was ſo ſoft, that they were eaſily cut with a knife. Many advantages, I am confident, may reſult from an accurate knowledge of the diſeaſes and ſtructure of the bones of the pelvis prior to delivery; it is, I am perſuaded, from a want of this information, that the Cæſarean operation has ſo often proved fatal in this country, for there is reaſon to ſuppoſe, that moſt of the women on whom that operation has been performed in this kingdom,* have been afflicted with malacoſteon, and conſequently in an irrecoverable ſtate, independent of any injury inflicted by the operation itſelf; and perhaps, if the nature of the diſeaſe had been more clearly underſtood, delivery per vias naturales might, in ſome inſtances, have been accompliſhed with ſafety to the child, without having recourſe to any other mode of delivery; and in theſe caſes, where malacoſteon has made ſuch dreadful ravages in the female conſtitution, beyond which the art of medicine has hitherto fallen ſhort of re-eſtabliſhing, it would be a nugatory practice, when attempted only with the view of preſerving the life of the mother, to have recourſe to either the Sigaultian operation or the Cæſarean ſection, as the woman would inevitably die, even if exempt from a ſtate of geſtation. If we advert to the numerous caſes of Cæſarean ſection performed on the continent, compared with thoſe of this country, it will be obvious, that the comparative fatality has been owing to this diſeaſe pre-exiſting to the operation; for, in no inſtance where the Cæſarean operation has been performed in this country, has it proved ſucceſsful to the woman, except the caſe of Jane Foſter, on whom† I performed the Cæſarean operation

* England, Ireland, and Scotland.

† Vide Medical Records and Reſearches, p. 154.

operation with ſucceſs, at Blackrod, in this county, a few years ſince; in which caſe the operation became neceſſary, on account of a deformity of the pelvis, incurred by an accident prior to a ſtate of geſtation, and not from any conſtitutional diſeaſe. The failure of ſucceſs attendant on the Cæſarean operation betwixt this and a neighbouring nation, is more aſcribable to conſtitutional diſeaſe, which thoſe women had laboured under in this country, who have undergone the operation, than to any difference of climate or mode of operating.

When premature delivery is attempted, with a view of ſuperſeding the Cæſarean ſection, it can only become neceſſary when the dimenſions of the pelvis are ſuch as preclude every other mode of delivery per vias naturales; upon this ground the practice will be confined to the embryon ſtate, or at at leaſt, ſoon after it has acquired to that of the fœtal period. The ſolicitude of the accoucheur in this extreme degree of diſtortion of the aperture of the pelvis, is wholly directed to the preſervation of the life of the mother, as every endeavour within the limits of our art, when tending to preſerve the fœtus in theſe ſituations, will be abortive; and how far the morality of the practice may be juſtifiable, when performed with the view of preſerving the life of the mother, and ſacrificing that of the fœtus, is not a matter eaſily determined; the well-known aptitude inherent in a woman to conceive under theſe circumſtances, and the number of fœtuſes eventually deſtroyed with the intent of preſerving the life of the parent, are incidents of the utmoſt importance to the community, and claim a proportionate ſhare of conſideration from every accoucheur concerned on theſe unfortunate occaſions. In a ſituation ſo depending, is the accoucheur excuſable who tacitly complies with the requeſts of the mother, and voluntarily ſacrifices a number of immature fœtuſes with a view to her own preſervation? As the Cæſarean operation in this ſituation may be made a matter of choice, may it not be allowable for the mother to exerciſe her judgment on the occaſion? In certain caſes, where the diſtortion of the pelvis is not very conſiderable, it is a practice adopted by ſome practitioners, as ſoon as the hand is admiſſible into the uterus, to return the preſenting head of the fœtus, and deliver by the feet; how far this mode of practice may be juſtifiable, I cannot pretend to ſay, as I am at a loſs to conceive how any material advantage can be obtained by reverſing the head, except it be where the uterine efforts are too feeble to accompliſh the exit of the fœtus in a natural preſentation, and where the advantage gained ariſes from the ſuperior degree of power excited by the accoucheur over that of the uterus. In caſes of this nature, and where the dia-

meter of the ſuperior aperture meaſures no more than three inches from pubis to ſacrum, the head of the fœtus will generally, by the repeated action of the uterus upon its body, be forced a certain diſtance into the brim of the pelvis; when this is accompliſhed, and the head is aſcertained to have advanced one-third within the ſuperior aperture, it will be adviſable to attempt delivery with the lever; for I have, in a few inſtances, ſucceeded with perfect ſafety to both mother and child with this inſtrument, even in caſes where the crotchet has been uſed in the preceding births; hence will appear the advantage of waiting till the head of the fœtus is become ſo far advanced in the pelvis, that the lever is admiſſible, rather than involving the life of the child in unneceſſary danger, by the implicit act of turning and delivering by the feet; a practice, even in the moſt promiſing ſituations, always attended with danger to the fœtus, and which has not hitherto been explicitly made clear by authors.

Another ſituation wherein premature delivery has been adopted, is in caſes of habitual miſcarriages at a certain period of geſtation, beyond which the fœtus is ſuppoſed to die. The practice of inducing premature labour while there remains a proſpect of the fœtus being alive, will involve the accoucheur in much ambiguity, particularly as the exact date of impregnation cannot clearly be aſcertained, nor can we altogether obtain a certitude of the life of the fœtus in utero, or whether the woman might not go to her full reckoning, till the art of midwifery has arrived at that acme of perfection, competent for the acquiring of the knowledge of theſe data. I think no one excuſable who attempts this ſpecies of delivery, as inſtances are not wanting, where, after a number of periodical immature births, the woman has, at length, gone to the full period of nine months, and become mater familias.

Authors appear divided in opinion reſpecting the danger incurred upon the mother, by exciting premature labour; the parity of hazard which reſults from this ſpecies of birth, on the ſcore of the woman, at the period of ſeven or eight months, will vary according to circumſtances, when contraſted with the event which will follow the termination of a labour at full time, and where the pelvis is diſtorted to the degree which I have fixed upon as indicable for this operation.

Were we to form an opinion on the event of a miſcarriage at the abovementioned period, we might be led to conclude, that little danger to the mother would follow this mode of delivery; but as the uterus is an organ in no reſpect governed by the will, and the efforts of that viſcus are moſt regular when left uninterrupted, therefore no compariſon will hold

good

good betwixt a premature delivery and one artificially produced, nor betwixt one at the full period of pregnancy where the pelvis is well formed.

An objection of much weight againſt this operation will naturally impreſs the mind of every humane accoucheur, namely, the difficulty of ſecrecy by which premature labour is effected; for I am firmly perſuaded, if ever the method ſhould be divulged amongſt a certain claſs of individuals, it will ſoon become too generally known, and the abortive attempts will be innumerable; this will doubtleſs defeat the intention of the operation, and lead to a crime of a moſt cruel and inhuman nature.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

BEING engaged in a large ſhare of Midwifery, and having delivered near two thouſand women, the caſe I am to relate never occurred to me till very lately: As I do not recollect to have ſeen or heard of ſuch an one, the inſertion of it in your valuable publication may not prove unacceptable. It may be a means of ſaving the young accoucheur a good deal of embarraſsment to be informed, that ſuch an occurrence will ſeldom cauſe any impediment to delivery, and that in no very great length of time the iſſue of it will be favourable. At a village near this place, I was called to deliver a woman of her ſeventh child, and who, I found, had been in labour ſome hours. Upon taking the neceſſary ſteps of information, I diſcovered the right labium different from what it ſhould be, and enough to excite my attention; but not conſidering this had any thing to do with the preſent buſineſs, I went on with the examination per vaginam. The os uteri was ſufficiently dilated to admit a part of the child's head into the pelvis. As the labour advanced, I had the opportunity of informing myſelf of the ſituation of the tumefied labium, which to my aſtoniſhment continued to increaſe. At length it acquired the ſize of a child's head juſt born, and became very tenſe, hard, and painful. About this period a conſiderable hæmorrhage took place, amounting in quantity, as far as I could judge, to a quart or more. I now began to be alarmed; and anxious to ſatisfy myſelf of this uncommon appearance of things, I made a more minute inveſtigation, and ſaw the true ſtate of the tumour; found it had burſted, aſſumed a dark livid hue, and that the bulk was not ſo much diminiſhed as we ought to have

have expected from the quantity of blood thrown out, and which evidently came from that quarter. The labour not advancing in proportion to the smartness of the pains, I suspected the pressure of the distended labia might prove the obstacle.—Upon which I was led, as well as from other circumstances, to support the tumour, and confine it in the best manner I was able to one side, so as to give as much room as the nature of it would admit, for the passage of the child's head. The labour was accomplished, and with much greater ease than I had reason to suppose. It may be right to notice a circumstance respecting both mother and child, that the one had a well formed pelvis, and that the head of the other was of a moderate size; the woman likewise was robust and in full health. The length of time I was taken up with this patient, did not exceed much more than an hour, so that the accumulation of blood in the cellular membrane could not have been long collecting. As soon the woman was settled in bed, she expressed more uneasiness from the weight of the tumour than from any thing else. The common applications that such accidents indicate, were applied, with a full direction to support the part in as convenient a way as could be thought of. The discharge continued for a few days in large quantities, and very offensive. On the twelfth day the labia had nearly got to its natural size; the discharge became more purulent, and at length the cure was compleated without any difficulty whatever. The constitution never suffered in the smallest degree from this local complaint. Why a rupture of a vessel should happen here, and why it does not oftener occur, is not my design to inquire. I am more inclined to suggest a remedy, which I confess I should be disposed to adopt, was a similar case ever to fall to my lot again; I mean, the scarifying the parts with freedom immediately on the coming on of the accident, with the view of preventing the great distention of the teguments and its consequences; but how far this would be conducive to the end designed, experience alone can decide. I am,

GENTLEMEN,

Stroud, Glostershire,
Nov. 26, 1800.

Your humble servant,
EDWARD HUMPAGE, Surg. &c.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

AT this time, when medical men are so much at variance concerning the treatment of burns and scalds, it behoves every one

one to contribute to the general ſtock of facts, upon which, rather than upon any pre-conceived theory, this new doctrine muſt be eſtabliſhed.—If you deem the following caſe ſufficiently intereſting to merit a place in your valuable Journal, by ſo doing you will much oblige,

GENTLEMEN,

Newcaſtle upon Tyne,
Dec. 3, 1800.

Your humble ſervant,
CHAS. NEWBY WAWN.

G. T. aged 14, ſtanding near a fire, with a caniſter which contained a conſiderable quantity of gunpowder in his hand, wantonly threw a few grains into the fire; the ſparks from which, communicating with the uncovered caniſter, produced an exploſion ſo violent as to burſt open the windows and door of the room in which he was. His right hand and the whole of his face were ſeverely burnt, the cuticle wholly abraded, and veſications formed; the eye-laſhes, eye-brows and hair on the forehead were entirely conſumed; he complained of violent pain, and ſhivered inceſſantly; pulſe 120.

On firſt ſeeing him, which was about twenty minutes after the accident, gts. xxx of laudanum were immediately adminiſtered, the ſpt. terebinth. was liberally applied to the whole of the inflamed ſurface, and above that, plaſters ſpread with Mr. Kentiſh's digeſtive ointment (Ung. reſin. flav. reduced to a thin conſiſtence with ſpt. teberinth). He was ordered to be put to bed. This occurred in the forenoon; I ſaw him again in the evening, when he declared himſelf quite eaſy and comfortable; had ſlept two or three hours, and during the afternoon had felt only at times a paroxyſm of pain, which was much leſs ſevere than at firſt; pulſe 112. A draught with gt. xx of laudanum was ordered to be taken at bed time. Second day, has paſſed a tolerably good night; the inflammation on the face appears leſs vivid. In removing the dreſſing from the inner part of the hand, the veſications broke, and a portion of the detached cuticle came off with it; from which, however, no unpleaſant ſymptom occurred; pulſe 105. Spt. terebinth. more ſparingly applied, other remedies continued. Third day, is materially better; has had a diſcharge from the angles of the eyes, which he has now opened for the firſt time; they appear ſlightly inflamed; purulent ſecretion beginning to take place on the hand, and partially on the face; pulſe 95. Draught omitted.

From this time ſtimulant applications were gradually withdrawn, and the parts were healed with cerat. lap. calam. which was completely effected in twelve days from the accident. The face is not in the ſmalleſt degree diſfigured, nor is the ſlighteſt veſtige of the burn to be ſeen on the hand, of which he retains the perfect uſe.

To

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

ENCLOSED you will find ſome remarks upon the nature and treatment of Diabetes; they are the reſult of an impartial and attentive inquiry; and if you think proper, I wiſh them to be inſerted in the Medical and Phyſical Journal.

I am,

GENTLEMEN,

Norwich, Dec. 8, 1800. Your obedient ſervant,

RICHD. LUBBOCK.

In the hiſtory and treatment of the morbid actions of the living body, experience tells us there is much difficulty in tracing any given effect to its appropriate cauſe; and the ſource of this difficulty will, by the reflecting mind, be readily and truly referred to the intricate ſtructure of the human machine, acted upon by a variety of cauſes, whoſe influence from their nature can be but remotely inferred, and which muſt of courſe frequently either eſcape or delude the eye of the niceſt obſerver.

I have been led to this train of thinking, from the too general diſappointment which medical characters ſuffer, in reducing to practice modes of treatment, in the opinions of their authors and inventors, ſaid to be effectual and certain in the removal of certain diſeaſes.—Many years have not elapſed, ſince the medical world was cheered with the proſpect of relieving cancerous affections by the aid of cicuta; and for ſome time we have been led to ſuppoſe mercury an antidote to hydrocephalus.—To enumerate ſimilar or more recent inſtances will be unneceſſary; it will be ſufficient to remark, that within the laſt two or three years I have experienced a ſimilar diſappointment, in my attempts to relieve ſeveral diabetic patients who have fallen to my care; and from what I have ſeen of this diſeaſe, I am led to think, that its mode of cure ſtill remains to be diſcovered.

In the full and ingenious publication of Dr. Rollo, a mode of treatment, ſaid to be efficient in diabetes, has been given to the medical world; but I think, in the ſubſequent obſervations, it will appear, that this mode has proved unſucceſsful in many caſes, although its application has been conducted with candor, and carried on with perſeverance.

I ſhall proceed therefore to detail the hiſtory of ſome caſes of this diſeaſe, which were taken into the Norfolk and Norwich hoſpitals, the event of which, it would ſeem, has been unfavourable

vourable to Dr. Rollo's theory and treatment of it. And from the obſervation which I have been able to make upon this diſeaſe, I think I am warranted in ſaying, that a leaning towards what is marvellous has pervaded, and in ſome meaſure diſtorted, the hiſtory of its ſymptoms and phenomena from the earlieſt times.

Thomas Smith, æt. 39, by trade a ſhoemaker, was admitted into the hoſpital, Dec. 21, 1799; he complained of an emaciation, which, he ſaid, had commenced about two years, and which had increaſed more particularly during the laſt twelve months. From his ſhrinking, the outlines of the face had become ſo ſtrong and prominent, as to convey to the moſt common obſerver, a ſtate of great diſeaſe. His ſkin was harſh and dry, and apparently altogether impervious to the perſpirable fluids; he complained of great thirſt, and of a ſenſation of heat about the ſtomach; and upon inquiry, ſaid he made a large quantity of urine. His appetite was good, and the abdomen was ſomewhat enlarged, but there was no particular irregularity of bowels. He had no affection of the prepuce, but complained of weakneſs of the loins; his ſight was alſo weak, and the verge of the eye-lids was red and ſlightly inflamed, and the gums were ſpongy and ulcerated. He had no particular pains. From the emaciation, the direction of the muſcles and the courſe of the veins over the whole ſurface of the body were ſo diſtinct as to denote the total abſence of fatty matter. But notwithſtanding this appearance of diſeaſe, he poſſeſſed conſiderable muſcular power, (a circumſtance peculiar almoſt to diabetic macies) and had been able to work at his buſineſs. His mode of living had not been marked by great intemperance, and he had only lately, from thirſt, indulged in a freer uſe of malt liquor and other liquids. Having ſeen him a week previous to his admiſſion into the hoſpital, I deſired him, during that interval, at different times, to meaſure the quantity of urine paſſed in twenty-four hours, and he found it vary from twenty-nine to thirty-one pints. After his admiſſion, his urine was regularly collected, and meaſured in the preſence of the houſe apothecary, every twenty-four hours, beginning from Sunday noon, Dec. 22. The following table will exhibit the quantity of urine paſſed daily, for the firſt few days; but a daily report being tedious and unneceſſary, afterwards the greateſt and ſmalleſt quantities paſſed during longer intervals are only noted. The figures above the line denote the dates; below the line, the quantity of urine paſſed. There will alſo be found ſubjoined, tables of the urine paſſed by two other diabetic patients. Of Richard Foſter, æt. 37, by trade a carpenter, who was admitted into the hoſpital, January 26, 1800, and who previouſly paſſed about 12 pints of urine daily; —of James Brown, æt. 43, by trade a weaver, admitted

April 6, 1799, who paſſed from ten to fourteen pints daily, previous to admiſſion.

SMITH.

Urine paſſed in 24 hours previous to admiſſion.	Dec. 22 to 23	24	25	26	27	28 to 31	Jan. 1 to 31	Feb. 1 to 28	Mar. 1 to 24
Pints 29 to 31	18	13 ½	9½	8	6	5	4 ¾ to 4	4 ½ to 4	4 ½ to 4

FOSTER.

Urine paſſed in 24 hours previous to admiſſion.	Jan. 26 to 27	28	29	30	31	Feb. 1 to 28	Mar. 1 to 23
Pints 12	9 ½	8½	8	8	7	6 to 4 ½	5 to 3 ½

BROWNE.

Urine paſſed in 24 hours previous to admiſſion.	April 6 to 7	8	9	10	11	12 to 20	May 1 to 26
Pints 10 to 14	6	5¼	4¼	5	4¼	3¼ to 1 ½	3 to 2

Of theſe patients, two were of what is termed the ſanguine temperament, having fair complexions and light hair; the third was ſomewhat florid, but had dark hair. I have mentioned the particulars of Smith's ſymptoms, his caſe being the more ſtrongly marked; and as the ſymptoms of the other two caſes differed from his only in degree, excepting that Browne's prepuce was affected with phymoſis, and Foſter's gums were not affected, I was of opinion any detail would be uſeleſs. It ſhould be obſerved, that the urine of all theſe patients was whey coloured, ſweet to the taſte, and had a violet ſmell.

The ſame plan of diet was purſued by all theſe patients; they were all allowed four pints of liquid daily, conſiſting of two pints of milk, and of two pints of meat decoction, for the moſt part beef, without any oatmeal or vegetable matter, and they had meat twice daily, viz. for dinner, and a ſmaller portion for ſupper. Bread and beer and every article of vegetable preparation were prohibited, and I have the greateſt reaſon to ſuppoſe theſe regulations were ſtrictly adhered to. It muſt be obſerved, the milk and meat decoction were meaſured with a common tin beer meaſure, and the meaſure by which the urine diſcharged was eſtimated was apothecary's meaſure; and upon a compariſon I found the pint beer meaſure uſed, contained an ounce and a half more than the apothecary's pint, ſo that the four pints of liquid daily taken, would exceed in quantity four apothecary's pints of urine diſcharged by ſix ounces, or be equal to four pints

ſix

ſix ounces; and it muſt alſo be recollected, in addition to the four pints taken, that theſe patients daily took from ſix to eight ounces of water, as a vehicle to the medicines which were thought neceſſary, ſo that the ſum of the liquid daily taken may be ſaid to be nearly equal to five pints, apothecary's meaſure.

The medicines taken were kali præparatum, natron præpar. aqua ammoniæ pura, kali ſulphurat, ammonia hepatizat. ferrum ammoniacale, &c. and they were given in full doſes, and for the moſt part under the inſpection of the apothecary.

This detail being premiſed, I ſhall proceed to offer a few remarks, naturally ariſing during the treatment of theſe caſes, which, if well founded, may, by an application to Diabetes in general, afford us more preciſe and accurate notions of it.

The circumſtance more immediately and ſtrongly aſſailing the attention, after the admiſſion of theſe patients into the hoſpital, was the immediate and ſudden reduction of the urine, which, as may be ſeen from the annexed tables, took place in a very few days, and in a degree ſo as not to exceed the quantity of liquid taken. This change taking place ſo rapidly, and before the quality of the diet ordered, or the effects of the medicines preſcribed, could have influenced the ſyſtem, awakened in my mind no ſmall doubt of the truth of a propoſition concerning this diſeaſe, which has been univerſally admitted as true, from the time of Aretæus to the preſent day; viz. that in this diſeaſe, the diſcharge of urine, in any given time, exceeds the liquid taken in the ſame time. The facts ariſing from the caſes above ſtated, tend in my mind to weaken the truth of this propoſition, by ſhewing, that the quantity of urine paſſed bears a more direct ratio to the quantity of liquid taken, and by no means exceeds it. That this is the caſe, I infer from the fore-mentioned tables; and from our ignorance of any proceſs or law of the animal œconomy, by which the liquid taken can, as ſuch, be augmented in quantity; and laſtly, from the various modes of treatment and theories of this diſeaſe, which have been foſtered by the imagination, with the ſole view of preventing and explaining this multiplying proceſs.

On this ſubject phyſiology affords us no aſſiſtance, and accurate obſervation tells us, that the baſis of all the liquids either remaining in, or diſcharged from, the animal machine, muſt have been received from without; and an attention to the foregoing tables will ſhew, that after the firſt few days, the urine daily diſcharged, continued, for weeks and months, to be leſs than the liquids taken.

From theſe facts and reflections, I am induced to deny that part of the hiſtory of this diſeaſe, that ſays the quantity of urine paſſed in a given time, ſurpaſſes the liquid taken.

And in carrying our inquiries farther, and to the origin of this ſuppoſition, it is rendered probable that it commenced in the obſervations, either made by Aretæus himſelf, or received by him from others, he having expreſsly and in terms ſaid, "that the quantity of liquid taken is not equal to the quantity of urine, for that there is more urine paſſed." I am fully aware, that Aretæus is ever quoted as a model of preciſion and accuracy in the detail of his hiſtory of diſeaſes, and to doubt what antiquity has ſanctioned, and habit has confirmed, may be thought a bold, perhaps an invidious undertaking; yet, I hope I ſhall not be charged with want of candour, when I ſay, from a review of the hiſtory of Diabetes, as delivered by this author, that it is more than probable his wonted judgment has not been exerciſed in the detail of its ſymptoms, either from the little opportunity which he had of ſeeing it, or from ſeeing it with a mind benumbed by the impulſe of aſtoniſhment. That ſuch is the caſe, his firſt remark will evince, in which he ſays, "that a wonderful phenomenon is the affection of Diabetes, and very rarely happening to man." And afterwards, in explaining more particularly the cauſes of this diſeaſe, and conſidering it "as a deliqueſcence or converſion of the ſolids into a liquid form," it would ſeem, that Aretæus found, to account for, and get rid of the ſolids ſo converted into liquid, a ſecond ſuppoſition was eſſentially neceſſary, giving origin to the opinion in queſtion, "that the liquid diſcharged by urine exceeded the liquor ingeſta."—This ſeems to me the origin of an error in the hiſtory of this diſeaſe; and to this ſource the fanciful details of caſes, the ſtrange perverted relations in the collections of Schenkius, as well as of others, may be truly traced.

If, however, it be proved, that the urine diſcharged does not exceed in quantity the liquid taken, an important concluſion readily preſents itſelf to the mind, which is, that the emaciation taking place in this diſeaſe, does not ariſe from any loſs ſuſtained by an undue or increaſed quantity of urine beyond the liquid taken; and therefore, ſome other cauſe is neceſſary to the explaining this phenomenon. On the ſame ground it may be obſerved, that the modes of treatment, inſtituted ſolely with a reference to the increaſed quantity of urine, are erroneous; and as ſuch, the rubbing the ſurface with oil or unctuous ſubſtances, to preclude abſorption from the atmoſphere, is unneceſſary and inefficient, as reſulting from a principle falſe and imaginary. Neither, to explain this ſurplus of urine, is the ingenious conjecture of Dr. Rutherford better founded, conſtituting the lungs an elaboratory of water, and giving them the function of forming water, by the union of the hydrogen of the blood with the oxygen of the atmoſphere. And having rendered it improbable

that

that the emaciation of Diabetes is connected with the quantity of urine diſcharged, I ſhall proceed to conſider the quality of Diabetic urine as marked by a ſaccharine or honied taſte. This quality, obſerved firſt by Willis, has attracted the attention of later authors, and more particularly of Dobſon and Rollo, who finding that a greater quantity of extractive matter is produced by evaporation, from a given quantity of diabetic than from the ſame quantity of healthy urine, have conſidered this ſaccharine product as a probable cauſe of diabetic emaciation. But it may be doubted, and perhaps with juſtice, whether the increaſed portion of ſaccharine extract in diabetic urine, be a cauſe adequate to the explanation of the ſtate of ſhrinking, and whether it be not rather an effect or coincidence than a cauſe.—In determining this queſtion, it will be neceſſary,

1ſt. To compare the extractive matter produced, by evaporating equal quantities of diabetic and of healthy urine.

2nd. To compare the quantity of extractive matter obtained from a given quantity of diabetic urine, with the extractive matter contained in the ſame quantity of liquid taken. And,

Laſtly, To determine whether the concurrence of any other cauſes may not contribute to the increaſe of extractive matter in diabetic urine, without ſuppoſing that the deſtruction of the ſolids contributes to ſuch increaſe.

With a view to the determination of this queſtion, a pint of Smith's urine was evaporated, at four different times, and the extractive matter was carefully collected; viz. a pint was evaporated immediately upon his admiſſion into the hoſpital, at the period when he was paſſing about thirty pints of urine daily, and, as near as may be, an ounce of ſaccharine extract was produced. In about a week, or as ſoon as the urine was reduced to the limited quantity of liquid ordered, another pint was evaporated, yielding of extract fourteen drachms. In a month or five weeks after the adoption of his curative plan, a third pint gave only ſix drachms of extract; and about a week before his diſcharge, another pint gave about an ounce of extract.

To explain the fourteen drachms of extract found in evaporating the ſecond pint, it may be obſerved, that this experiment took place as ſoon as the urine paſſed was reduced ſo as not to exceed the quantity of liquid daily ordered, and therefore it was probable that all the extractive matter contained in the greater quantity of liquid taken, previous to his admiſſion, when he indulged his thirſt (not to notice the ſolid) was not yet eliminated from the ſyſtem; ſo that the liquids taken, being abridged to a given and much ſmaller quantity, there was found, for a ſhort interval, in every pint of urine, a greater and unuſual

uſual proportion of extractive matter. This explanation being admitted, it will appear, that the extract of Smith's urine, accurately ſpeaking, varied only from an ounce to ſix drachms.

To find the difference between this quantity of extract and that found in healthy urine, five pints of urine taken from healthy perſons were cautiouſly and ſeparately evaporated, and it was found the extract produced, varied from half an ounce to rather more than ſix drachms for each pint. Hence then it would appear, that the difference of the extractive products of healthy and diabetic urine is not ſo great as to afford a probable cauſe of the emaciation in diabetes;—and this will appear more fully hereafter.

But, in ſpeaking upon this ſubject, permit me to ſay, that a ſingular concurrence of events, but remotely connected, has caught my attention in this diſeaſe; I refer to the conſtant coincidence of the parched and unperſpiring ſkin with the ſaccharine quality of the urine; this concurrence has induced me, at times, to believe that in this diſeaſe the want of perſpiration, or of the excretion from the ſurface, was connected with the ſaccharine quality of the urine; and this belief has received farther ſupport from an examination of the nature of the perſpirable fluids, and of the component parts of ſaccharine matter. It has been proved that ſugar is, for the moſt part, compoſed of carbon, oxygen, and hydrogen united in a certain ratio; and it appears, by the experiments of Cruikſhank and Abernethy, that, beſides the occaſional aqueous fluid diſcharged daily from the ſurface of the body, about three gallons of carbonic acid are alſo loſt to the ſyſtem by the perſpirable matter. Now ſuppoſing, as happens in diabetes, this perſpirable excretion, or carbonic acid, is ſuppreſſed and retained in the ſyſtem, it is probable that the carbon and oxygen of the acid ſo retained, by entering into a due combination with ſome portion of the hydrogen of the animal body, may tend to the production of the ſaccharine matter of the urine; and as the carbonic acid is the general product of the vegetable world, it would follow, that its retention, in the animal body, may produce the phenomena of the defective animalization, characteriſing diabetes, as exhibited in the formation of ſugar.

Thus, in the preceding remarks, have I attempted, and I truſt with impartiality, to invalidate certain data concerning the hiſtory and theory of diabetes; I have attempted to diſprove the generally received notion, that in diabetes the urine is diſcharged in a greater ratio than the liquid taken; and I alſo truſt I have rendered it improbable that the quality or quantity of the extractive matter diſcharged by urine, is a principal cauſe of the emaciation; having ſhewn that ſuch extract may more juſtly

juſtly be referred to that contained in the liquid and ſolids taken into the body; and having made it probable that its ſaccharine quality may depend upon, or be connected with, the ſuppreſſed perſpirable matter. Hence then it is evident, that any mode of cure, or plan of treatment, inſtituted ſolely with a reference to the increaſed quantity, or altered quality of the urine, muſt be defective and unſucceſsful; and, therefore, proceeding upon theſe erroneous principles, it will ceaſe to be a matter of ſurprize, that, in the above caſes, I ſhould have adopted the ſuggeſtions of Dr. Rollo, without the advantages I had been taught to expect. In the three caſes given above, a diet conſiſting ſolely of animal food, with the free and full uſe of the different alkaline medicines, including a liberal uſe of hepatized ammonia, effected little or no change in the general health. —And in Smith's caſe, although theſe regulations of diet and medicine were rigorouſly attended to, I cannot ſay that any great or obſervable change was induced in the quality of the urine, which ſeemed, in a great meaſure, to retain its ſaccharine taſte and violet ſmell. And in this caſe, ſuppoſing that the milk taken might keep up theſe appearances, inſtead of the two pints of milk two additional pints of ſtrong meat decoction were ſubſtituted, ſo that nothing but highly animalized food was taken; and under this plan he remained ſome weeks, but without any real advantage. At length, after a due perſeverance, and becoming tired of the little variation of his food, his diet was ordered, on a ſudden, and without any gradation, to be changed to the common hoſpital diet, conſiſting of bread, vegetables, meat, malt liquor, and milk pottage, adhering however to the taking, in liquids, only four pints daily. By this alteration of the nature of the liquids and ſolids taken, no marked change in the quantity or quality of the urine was induced, and he remained in the hoſpital ſome time without any change in the urinary diſcharge.

But it may be ſaid, that this patient had been in the uſe of animal food ſo long, that his ſyſtem was rendered proof againſt the influence of vegetable or mixed diet, as ſhewn by increaſing the quantity or the ſaccharine quality of the urine; — in anſwer to which, it muſt be permitted me to remark, that Foſter, another patient, had been, at the time in which Smith's diet was changed, only about a fortnight in the hoſpital, and had only for that time purſued the animal diet and alkaline medicines, and the urine diſcharged was in the ratio of the four or five pints of the liquids taken, as the table will ſhew; and to determine what change would be induced in the urine diſcharged after ſo limited an uſe of animal food and alkalies, he was alſo ordered, on a ſudden, to take the uſual diet of the houſe,

houſe, conſiſting of vegetables, bread, malt liquor, meat, &c. but, on a cautious inquiry, it did not appear that the urine was increaſed in quantity; and in quality, ſo far from exhibiting a more wheyiſh or ſaccharine appearance, it was evidently, for ſome days, of a higher or more amber colour.

After this ſtatement, the power of a vegetable or mixed diet, in re-producing diabetes, by increaſing the quantity, or altering the quality of the urine, may with reaſon be doubted.

In the treatment of diabetes, patients are led, by the attention given by medical men to the quantity and quality of the urine, to ſuppoſe the ſole cauſe of their diſeaſe to be connected with the ſtate of the urine; and, therefore, whenever either the quantity of urine is obſerved to be reduced to the natural quantity, or the quality of the urine is deemed more favourable, they fall into the greateſt deluſion reſpecting their general health, by aſſerting in terms that they are becoming well, or free from diſeaſe, although, at the ſame time, the degree of emaciation is evidently growing worſe and advancing. This deluſion was ſtrongly exemplified in the three caſes before mentioned, their language being, from the decreaſe of their urine, that they had loſt their diſeaſe, although at the ſame time they were gradually loſing fleſh; and it is not to be doubted, but that, at no diſtant period, they will fall victims to the emaciation. And to the ſame end, it may be obſerved, in the various caſes reported in the accurate publication of Dr. Rollo, that very few, if any, excepting Capt. Meredith, ſeem to have regained their fleſh, although, from the urine being in quantity abridged by an abridgment of the liquids taken, they were deemed to be cured. This continuance of the emaciation may be remarked in the caſe of Clarke, ſo accurately reported by Dr. Gerard; for this patient's urine being reduced, he was diſcharged as cured by his phyſician, even at a time when his emaciation was ſtationary, or even increaſing; for being weighed upon the day of admiſſion into the Liverpool Hoſpital, and upon the day of his diſcharge, it was found his weight had decreaſed one pound. And the continuance of the macies in the caſes ſo well deſcribed by Dr. Cleghorn, and in the other caſes reported in S. Rollo's book, proves the diſeaſed ſtate to have been unaltered, and to have reſiſted the curative means made uſe of. And I have no heſitation in ſaying, that it is probable, ſince the appearance of Dr. Rollo's book, containing thoſe caſes, many of them are ſuffering from greater emaciation, or may have paid the debt of Nature: And it would be an uſeful document to lay before the public, could Dr. Rollo procure from his correſpondents the particulars of every caſe that he has printed, ſhewing their ſubſequent progreſs; by which it might

might be known in what degree we may expect a fatal or salutary termination of this disease.

From all that has been said, it would seem, that the leading circumstance in diabetes is the macies, which, from the experience which I have had of this disease, frequently comes on slowly and tacitly, the subjects of it not perceiving or not feeling much deviation from health: In this way, I have known persons for three or four years affected with diabetes, but possessing a degree of strength equal to the various exertions of pleasure or of business; and under this degree of diabetes, I have, at this time, two patients, who, excepting a slight and very gradual wasting of the body, some increase of thirst, with occasional uneasy sensations about the stomach, to which may be added, feebleness of sight at times, and an habitual tendency to phymosis, possess that degree of apparent health and strength that would mislead a common observer. And to treat patients with so slight a deviation from health, it must be allowed, is an arduous and difficult enterprize; plans of diet may be prescribed, and medicines may be ordered, and the nature of their complaint may be duly pointed out to them, yet, irregularity in their application will necessarily occur, and a frequent violation of all the necessary salutary proceedings will take place; and, perhaps, from this cause it has happened, that I have not found even this incipient state of macies in diabetes removed; and when it is more advanced, I have never seen it yield to any curative measures, but it has continued to increase more and more, till after a lingering and protracted wasting of the solids, the unhappy sufferer sometimes displaying a countenance the most hollow and hagard, with the different members, as it were, barely enveloped with the skin, at other times presenting an aspect bloated with anasarcous swellings, sinks gradually into the arms of death. And as has been before observed, in this disease considerable muscular power remains with great emaciation; and this circumstance, I believe, has led very judicious practitioners to conclude, that diabetic patients have been materially relieved by certain curative means. But it is the emaciation that claims the first attention of the physician, for, without the removal of this symptom, neither the reduction of the urine, the alteration of its quality, nor the appearance of considerable remaining muscular power, will prove that the disease has yielded to any curative process.

These observations may have been lengthened beyond the limits intended; should they, however, in any degree tend to convey to the mind, notions more accurate of the nature and treatment of diabetes, my principal object, the promotion of

medical ſcience, will be attained. And I ſhall now only ſubjoin a few general concluſions; and,

1ſt. From what has been ſaid, it would ſeem, that in the noſological arrangement of diabetes, authors have materially erred, as it ſhould neither be claſſed with Cullen among the ſpaſmi, nor with Sauvage and others among the fluxus and profluvia; according to Cullen's arrangement, it ſhould fall under the claſs cachexia, and in the order marcores; and were I aſked to give a definition of it, I ſhould give the following, keeping in mind the conjecture of the connection of the retention of perſpiration with the ſaccharine quality of the urine, as cauſe and effect: I ſhould define it,

Macies (anidrotica) cum cute non perſpirante, cum urina mellita, et plerumque multa ex multo potu, et haud raro cum palpebris, præputio et gingivis inflammatis.

And as from experience it would ſeem that this ſpecies of macies has hitherto admitted of no ſubſtantial relief from medical treatment, I am diſpoſed to conſider it with Selle and Neitzkius, as a diſeaſe of the lymphatic ſyſtem. It muſt be underſtood, that I am here ſpeaking of what may be termed idiopathic diabetes, and not of that ſpecies which Sydenham and others have mentioned as ſupervening as a ſymptom or ſequela of acute diſeaſe, and which is of ſhort duration.

2d. It is proved, that in diabetes the urine diſcharged is in a direct ratio of the liquids taken; ſo that in the caſes reported by Dr. Rollo, it would ſeem, as the macies remained unaltered, that all that was effected by the curative plan was, by abridging the quantity of liquid taken to abridge the urine diſcharged.

3dly. And if the urine diſcharged follows the liquid taken, it is evident the various alkaline preparations cannot influence the quantity of the urine; and from what has been ſaid, it may be much doubted, whether the quality of the urine is materially affected by them.

Laſtly. The occurrence of phymoſis has been mentioned by my friend, Dr. Girdleſtone, as a conſtant or pathognomonic ſymptom of this diſeaſe; but I find this ſymptom is dependent upon the formation of the prepuce, for in Smith and Foſter, the worſt caſes which I have met with, this ſymptom was abſent. This ſymptom has, however, taken place in four other caſes which have fallen to my care, two of which poſſeſſed ſo much apparent health, that the obſtinacy of this ſymptom afforded a clue to the unravelling of the nature of the complaint.

And in treating of the extractive matter of diabetes, authors ſeem to have confined their attention to the condition of the urine,

urine, or of the liquid difcharged, conſidering ſuch matter as derivable ſolely from the ſyſtem, without carrying their thoughts to the examination of the extractive matter contained in the liquid received and taken into the body. Hence, if Smith paſſed thirty pints of urine daily, each pint yielding an ounce of extract, it would ſeem as if they concluded, that thirty ounces of extractive matter were taken from the ſyſtem daily. But let it be remembered, that this man took daily thirty pints of liquid, conſiſting of porter and other malt liquor; of milk, water, &c.; that his appetite being good, he took freely of bread, meat, vegetables, &c.: Then ſuch liquids and ſolids will readily afford a cauſe adequate to the production of the thirty ounces of extractive matter contained in the thirty pints of urine paſſed.

Hence it is probable, the quality of the urine is not the cauſe of the ſhrinking, for the origin of the extractive matter found in the urine may be referred to that taken in by the liquids and ſolids, without recurring to any loſs ſuſtained by the ſolid compages of the body and its conſequent emaciation.

Farther, theſe arguments againſt the ſaccharine matter as a cauſe of the ſhrinking in diabetes, will receive a conſiderable acceſſion of ſtrength, from a compariſon of the nature and quantity of the liquids and ſolids taken daily by Smith after he had been in the hoſpital ſome time, with the quantity of extractive matter diſcharged by urine daily. In this caſe, two pints of good milk, and two pints of ſtrong meat decoction, were daily taken; and alſo for dinner, not leſs than from ſix to eight ounces of boiled beef or mutton; and for ſupper, not leſs than from three to four ounces of the ſame meat were allowed. And after he had uſed this plan for ſome time, it was found by experiment, he diſcharged daily from four pints to four pints and a half of urine, each pint yielding only ſix drachms of extract; ſo that, in twenty-four hours, little more than three ounces of extractive matter were diſcharged, a quantity which by no means equalled the extractive matter contained in the milk and the liquids taken daily; and therefore ſome portion of the extractive matter of the liquids, and the whole of the ſolids, might have been added to the ſyſtem, and might, notwithſtanding the diſcharge by urine, ſeemingly, have anſwered all the purpoſes of nutrition, and might, of courſe, have acted as a barrier to the increaſing emaciation.

And, moreover, that the loſs of ſubſtance in Diabetes is not connected with any quality of the urine is farther ſubſtantiated, when it is conſidered, that allowing ſome ſmall increaſed diſcharge of urinary extractive matter in theſe caſes beyond what takes place in health, it is well known that ſuch patients are

ſaved any loſs from the fluids or ſolids of the body by the abſence of the wonted excretion of the ſurface, perſpiration ſenſible and inſenſible being as it were annihilated from the torpor and total inaction of the perſpiratory veſſels. And hence it would appear, by the defect of perſpiration, a quantity of fluid and its extract is ſaved, and retained in the ſyſtem, and perhaps more than a counter-balance to any increaſed quantity of extractive matter diſcharged by urine: And by this train of thinking, I have been induced to conclude, that the quality of the urine cannot be conſidered as the cauſe of the ſhrinking in Diabetes.

Case of Blindness from Effusion of Blood in the Chambers of the Eye, from suppressed Catamenia, cured by Electricity; by Mr. RICARDS, *Surgeon, of Brentford.*

To Dr. BRADLEY.

SIR,

THE following caſe being ſuch, I think, as deſerves the attention of the public, I beg leave, through the medium of your Journal, to make it known.

Miſs ——, aged 17 years, after a troubleſome head-ache, which continued ſeveral days, became nearly blind of one eye, ſo much ſo that ſhe could only diſtinguiſh light from darkneſs; and every object which ſhe attempted to view, appeared of a reddiſh hue. Her friends, much alarmed at this ſudden acceſſion of ſo terrible a malady, as the eye had to them a moſt frightful appearance, immediately made application to the moſt eminent of the faculty, particularly to ſuch as made the diſeaſes of the eye the principal part of their practice. By accurate examination, it appeared that the chambers of the eye were filled by an opake, dark coloured fluid, inſtead of the tranſparent aqueous humor, and the whole eye appeared ſuffuſed with blood. Conſidering the diſeaſe as local, ſuch remedies were directed as are generally employed to diminiſh local plethora, and to promote the abſorption of the effuſed fluid. Leeches were applied to the temple, cathartics, bliſters, &c. and ſhe continued to follow theſe directions, and to purſue this plan of treatment for ſeveral months; but as no amendment was perceptible, ſhe became weary of a courſe from which ſo little benefit was derived; at length, ſhe was adviſed by a friend

to

to try the effects of electricity, who requeſted her to wait upon ſome practical electrician, and deſire him to paſs a ſtream of the aura from a wooden point into the eye daily, which ſhe did accordingly.

The nature of the caſe being very fully inquired into, (for, being conſulted, I never chuſe to make uſe of any means without knowing a reaſon why) and the progreſs of the diſeaſe, and the methods hitherto uſed, being very ſatisfactorily explained by the young lady's mother, it appeared that the blindneſs was more conſiderable at ſometimes than at others, previous to which there was generally a conſiderable head-ache; and that theſe occurrences for the moſt part took place about every third or fourth week; and that the diſeaſe had from the beginning been attended with obſtructed catamenia, which circumſtance had been very much overlooked by the oculiſts who had been previouſly conſulted; but though no menſtrual evacuation had taken place, the uſual fore-running ſymptoms had generally occurred. If we ſtop a moment to theorize upon the diſeaſe, it would ſeem, that Nature had made an effort to perform her regular office; but from ſome cauſe of inactivity in the uterine ſyſtem, the proper catamenial ſecretion had not taken place, in conſequence of which the ſuperabundant blood had fallen upon ſome other part; the veſſels, in this inſtance, which ſecrete the aqueous humor had become enlarged and ruptured, and pure blood, or blood mixed with the aqueous humor, had been poured into the chambers of the eye. The peculiarity of this caſe is in the part on which Nature has directed her efforts; we frequently ſee her pouring out her periodical diſcharges by the lungs, by the veſſels of the Schneiderian membrane, or by ulcers in different parts of the body. In ſuch caſes, it appears to me that we ſhould not apply our remedies to the eye, the noſe, the lungs, or the ulcer, but to the uterus; for if this organ can be excited to a proper ſecretion, the evacuations from the other parts will ſoon ceaſe; the ſequel of the preſent caſe will prove this to be true, in this inſtance at leaſt.

I conſider that the remedies employed to produce this effect on the uterus ſhould be made uſe of about the time when the uſual ſymptoms, which precede menſtruation begin to appear; therefore, in order to divert the patient, but without expecting any real benefit from ſuch a mode of application in a caſe of this kind, ſhe had, daily, ſtreams of electric aura paſſed into the eye, and likewiſe ſmall ſhocks through the pelvis, waiting till ſymptoms indicated an effort of Nature to perform her proper office.

When ſuch ſymptoms began to appear, as pain in the head and

and loins, tenſion of the breaſts, &c. the ſhocks were greatly increaſed both in number and ſtrength, without informing her of any intention of making ſuch an increaſe of power; in a day or two the catamenial evacuation took place in a proper manner, and the eye was viſibly clearer; the electricity was omitted till the next periodical return of ſymptoms, when it was repeated; the catamenia again appeared, and the eye very ſpeedily recovered its original tranſparency, nor did any return of obſtruction take place.

I conſider this caſe as one on which much may be ſaid, relative to the good effects of electricity in uterine caſes; I would not be underſtood from hence to recommend electricity in every caſe in which obſtructed menſtruation is a ſymptom; in ſome ſuch caſes I am well aware that its uſe would be injurious, rather than ſalutary. I would diſtinguiſh thoſe caſes in which amehorrhœa is a cauſe, from thoſe in which it is an effect of the diſeaſe. Chloroſis, I conſider as a diſeaſe of the latter kind; the ſymptoms, here, all indicate a paucity of blood, and Nature, in this caſe, acting as a judicious phyſician, prevents the loſs of that fluid, whoſe deficiency is the very eſſence of the diſeaſe, by reſtraining this cuſtomary evacuation; it would therefore, I think, be highly improper to endeavour to force ſuch an evacuation by any remedy which may be conſidered as emenagogue, of which I certainly conſider electricity to be the moſt active; nevertheleſs, I know that it is the practice of ſome gentlemen of the profeſſion to adviſe venæſection, almoſt invariably, in this diſeaſe. But where there is ſuppreſſed menſtruation from any accidental cauſe, where no ſymptoms of paucity of blood exiſts, or where Nature points to ſome other emunctory, or ruptures veſſels in remote parts of the body, here the re-production of the catamenia muſt be our chief concern; and to effect this, from repeated experience I can affirm, and I know it likewiſe to have been the reſult of the practice of others, electricity will effect more than perhaps any other remedy; and if uſed in combination with other remedies, will greatly aſſiſt them in their curative intention. I have the honour to be,

SIR,

Your moſt obedient ſervant,

Brentford, Dec. 14, 1800. JASPER RICARDS.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

SINCE the publication of thoſe obſervations, which I have ventured to call demonſtrative of the anti-venereal power of acids, I have received further teſtimonies. I encloſe a ſpecimen.

I have made ſome progreſs in a collection towards defraying the expence of a ſet of public experiments. Mr. Pearſon thinks with me, that a ſeparate eſtabliſhment is beſt ſuited to the deciſion of this queſtion. Among other regulations, it ſeems neceſſary for ſatisfying the public mind, that a perſon of unſuſpected probity ſhould be fixed upon to adminiſter the acids; that this perſon ſhould ſwear to the fidelity of his reports; and that the nurſe and patients ſhould ſwear, the one not to ſupply, or cauſe to be ſupplied, any article not directed; the other, not to take any ſuch articles.

It is not merely for the ſake of bringing our controverſy, important as it is, to an iſſue, that ſuch a plan is deſirable; the contradictory reports place before our eyes the exiſtence of a moſt criminal levity in obſerving a diſregard to truth in reporting. What human being, who conſiders that he himſelf, and thoſe he moſt values, are one day deſtined to become the ſubjects of medicinal proceſſes, but muſt tremble when he perceives that there muſt be, at the preſent time, in this enlightened country, a conſiderable number of reputable medical practitioners, incompetent to the deciſion of one of the eaſieſt and moſt palpable problems belonging to their art; who cannot, or will not uſe their ſenſes with a little coolneſs, patience, and impartiality? When ſuch a perſon is to be treated for an obſcure internal diſeaſe, in what hands ſhall he deem himſelf tolerably ſecure?

It appears from an hundred examples, that any man may publiſh almoſt any thing concerning any remedy, with ſome chance of a lucrative reputation, and at ſcarce any hazard of ruinous diſgrace. Not only, therefore, will a public ſcrutiny expoſe that party, which, in the diſpute concerning the acids, is chargeable with ſuch portentous incapacity; but it will ſerve as a wholeſome leſſon to thoſe who are ready to diſcharge their crudities upon the public.

For my own part, I feel aſſured that the inquiry will confirm the favourable atteſtations. And there are two arguments ariſing from a comprehenſive view of the documents on both ſides, which muſt ſtrike impartial judges. 1. The affirmative caſes were very open to inſpection; and at Plymouth, Woolwich,

wich, and in India, they were actually inſpected by a number of medical men, in no reſpects biaſſed in favour of acids. 2. Among the aſſertors are perſons equally verſed in medical obſervation, and in experiments on inanimate matter; an exerciſe which habituates the eye to examine with accuracy, and the mind to reaſon ſtrictly, and which ought to be made an indiſpenſable requiſite in medical education.

So much having been ſaid in Europe on the ſubject of relapſes, the Eaſt India practitioners have been induced to attend particularly to this objection. And Dr. Helenus Scott, in a letter too late for my laſt pamphlet, thus ſtates the reſult.

"With regard to relapſes, when recent caſes have been cured by the nitric acid, I believe they occur leſs frequently than after mercury. Mr. Stuart, Dr. Keir, Mr. Macgregor, and myſelf, have cured by it, within theſe eighteen months, above one hundred patients with primary ſymptoms, one only of whom has relapſed. This man, a patient of Mr. M'Gregor, came back to him with a ſmall chancre on the prepuce, but it is doubtful if this did not ariſe from a freſh infection. No practitioner ſurely will aſſert that ſo great a number would have continued well, who in this country had been treated by mercury."

I am glad of an opportunity to mention that my pamphlet is much diſfigured by errors of the preſs. In many places of the preliminary diſcourſe, in ſpite of my corrections, the London printer has made me write ſtrange Engliſh. There are few places, however, where the ſenſe cannot be made out; and I hope by this time, that all the copies are provided with a liſt of errata. I only beg leave to mention here, that at p. 51, l. 21, *citric* acid ſhould be read in place of *nitric*. I am,

GENTLEMEN,

Reſpectfully, your's,

December 12, 1800. THOMAS BEDDOES.

To Dr. KIER, from CHARLES FORBES, Eſq.

My dear Sir,

Agreeably to your deſire, I now ſend you the particulars of the cure effected by Dr. Scott on one of our ſervants, by the uſe of the nitric bath.

About a twelvemonth ago, the ſervant alluded to (a native boy of 16 or 17 years of age) was ſeized with violent pains all over his body, but particularly in his head and loins, which were moſt ſevere in the night time, and entirely deprived him of reſt, except what he procured with the aſſiſtance of tobacco

or

or opium, he ſoon became reduced to a ſkeleton, and ſo ill that he had nearly loſt the uſe of one of his legs and thigh, the muſcles of which were ſo much contracted that he could only put his toes to the ground, and his ſkin was covered with white ſcabs or ſcales. Hitherto he had perſiſted in denying that he was ever infected with the venereal diſeaſe, and attributed the pains in his bones, and contraction in his leg and thigh, to a ſtroke of the land wind, which was corroborated by the opinion of the other ſervants; he now confeſſed, however, that he had caught the venereal diſeaſe about a year before, which he deſcribed to have been a running and ulcers, and that he removed thoſe ſymptoms by drinking milk, which had been recommended to him by one of his friends, but that he took no mercury nor any other medicine. On deſcribing the boy's caſe to Dr. Scott, he was ſo good as to viſit him, and recommended the nitric bath, which was immediately commenced in the uſual way, at firſt twice daily, and about half an hour at a time; but it was remarkable, that in the courſe of a week, the boy found himſelf ſo much relieved, that he repeated the bath half a dozen times in the day of his own accord, and at length would frequently ſit two or three hours at a time up to the neck in it, until his ſkin became ſo ſore that he could hardly bear to put on his clothes. His head-achs had now left him, he reſted well, and only complained of the pain in his loins, which, by a moderate uſe of the bath, was alſo removed in the courſe of about a month from the time he firſt began it, and he gradually recovered the uſe of his leg. He is now in perfect health, and has had no return of his complaints. He never took mercury, but his mouth was conſiderably affected by the uſe of the nitric bath.

I take this opportunity of mentioning two other inſtances of the efficacy of the nitric acid, which have come within my immediate obſervation. The firſt is that of John Hibernia, a Caffree, aged about forty, who was ſervant to the late Colonel Nugent, and whom Mr. Forbes put under Dr. Scott's care about two years ago; he was afflicted with venereal pains in his bones, for which he had been repeatedly ſalivated by mercury, but received only a temporary relief from it, for when the effects of the mercury ceaſed, his pains returned. Dr. Scott adminiſtered the nitric acid internally, and in the courſe of a few weeks compleatly cured him. I lately met him on the road, and on queſtioning him reſpecting his health, he informed me that he was perfectly well, and had been ſo for a twelvemonth paſt.

The ſecond inſtance alluded to, is that of an officer of one of our ſhips, for whom I requeſted Mr. Boag's advice. Having

accidentally ſcratched his finger, it turned into an ugly ſore, which gave him exceſſive pain, and although timely applications were made, it ſeemed to deſy them all, and at length put on ſo putrid an apperaance that Mr. Boag thought the bone was affected, and that the loſs of the finger muſt enſue. He now recommended a trial of the nitric acid upon it; and by bathing the finger in it, three or four times a day, as ſtrong as it could be borne, the ſore was ſoon healed up, and the finger got perfectly well.

I remain, your's,

Bombay, Jan. 1800. C. FORBES.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IT will, I preſume, be gratifying to the numerous liſt of phyſicians and ſurgeons, who have patronized Dr. Jenner's diſcovery, to hear that the inoculation of the vaccine diſeaſe is making rapid progreſs in the fleet. This buſineſs has been much facilitated by the kind attention with which the matter is ſupplied to our ſurgeons, as they arrive from ſea, by Meſſrs. Dunning and Little, two eminent ſurgeons in this town. I embrace this opportunity, as the executive medical officer of the fleet, to offer them my beſt and moſt grateful thanks in the name of the public ſervice. Mr. Stephen Hammick, of the Royal Hoſpital, is alſo intitled to this public acknowledgement for ſimilar kindneſs.

If the value of any improvement in the practice of medicine is to be eſtimated by its contracting the ſcope of human miſery, the JENNERIAN INOCULATION will be deſervedly recorded as one of the greateſt bleſſings to the navy of Great-Britain that was ever extended to it. Since the publication of my ſecond volume of Med. Nautica, not leſs than eleven ſhips of the line, beſide frigates, have imported, from various ſources, the variolous contagion.

In the flag ſhip of the commander in chief, while refitting at Portſmouth, laſt ſummer, it extended to twelve caſes before it was checked. Dr. Felix, who then officiated as ſurgeon of the Ville de Paris, reports to me, that more men were found who were unconſcious of having had the Small Pox, than had been known in any other ſhip of the line. One ſhip of ſeventy-four guns, carried it to ſea in the ſpring, and buried five ſeamen during the cruize; another has carried it abroad, the fate of which

which I have not yet learned. The Impetueux, now in harbour, received the Small-pox from Dock, where they rage with conſiderable mortality. A lieutenant in this ſhip ſet the example of the new inoculation to the ſeamen; ſixteen have taken it, and others, from ſuperſtitious motives, ſtill hold back.

When the candid enquirer, at ſome future period, ſhall canvaſs theſe obvious facts, it will be ſeen whether I was acting an inconſiderate part in recommending the practice in the navy, when it firſt came before the public, as malignantly ſtated by ſome cold-hearted critic of the preſent day.

In the ſpring of the year, when fevers of the low kind were rather general in our ſhips, the *affuſions of cold water*, as recommended by Dr. Currie, of Liverpool, were found of great ſervice by Meſſrs. Farquhar, of the Captain, and M'Grath, of the Ruſſel. Theſe gentlemen had their hands full for a length of time; but I am diſpoſed to mention the trials here, that the learned author may know that his advice is not thrown away upon us. Other particulars will appear, in due time, in our future Hiſtory of Health.

Since my laſt communication on Coxwell's Concrete Citric Acid, experiments have been directed by the Right Honourable Lords Commiſſioners of Admiralty, with their uſual benevolence, and the reports of ſeven ſhips uniformly confirm the firſt trials. This preparation of the lemon has now got to the meſs table of all our officers, and will, no doubt, become general. The ſubject of ſcurvy is thus finally diſcuſſed, unleſs Sir Francis Milman, Bart. ſhould produce ſome freſh arguments to ſupport his theory, in a new edition of his elegant work. The apothecary will alſo find a pure and permanent ſolution of this acid a valuable addition to the ſhop.

With reſpect to my own ſtudies, as well as a moſt cruel rheumatiſm will permit, I proceed as heretofore, like Horace,

Condo et compono quæ mox depromere possim.

I have not heard a word of the Nitrous Fumigation from the ſurgeons for theſe many months. The maſterly diſplay enforced by the illuſtrious officer at the head of the fleet, has effectually ſubdued all wavering opinions on that ſubject. We ſhall, however, always be glad to receive hints from phyſicians at the weſt end of the town; and let them be aſſured, there is no prejudice here, but the utmoſt deſire to improve. I am,

GENTLEMEN,

With much deference,

Your obedient humble ſervant,

T. TROTTER.

Plymouth Dock,
Dec. 9, 1800.

Reply to Mr. Oliphant's Information on Mrs. Craib's Case of Cancer; *by* WILLIAM NISBET, M. D. Fellow of the Royal College of Surgeons, Edinburgh, &c.

To the EDITORS of the MEDICAL and PHYSICAL JOURNAL.

Gentlemen,

IN the Nineteenth Number of your Journal, was inſerted a caſe of the cure of Mammary Cancer, as drawn up by Dr. Niſbet. The relation of that caſe has excited much attention, and much medical ſcepticiſm has been betrayed on the ſubject; to favour which, in your laſt number, a new ſtatement has even appeared, under the title of *information* reſpecting the caſe of Mrs. Craib, by Mr. Oliphant the attending ſurgeon. As the title of this ſtatement is clearly meant to imply a reflection on the former relation, it is my duty to reply to it fully; and to ſhow, that the facts *then* advanced, and the principles of treatment then detailed, were equally juſt, and deſerving the notice of the public.

In making this reply, I ſhall firſt examine the deſcription of the diſeaſe preſented by Mr. Oliphant; 2dly, the principles aſſumed by him as effecting the favourable termination of it; and, 3dly, remark on the analogous caſes cited by him in ſupport of theſe principles.

With reſpect to the deſcription of the diſeaſe, little difference occurs to be noticed in the two ſtatements; indeed, the morbid appearances were ſo ſtrongly marked and characteriſtic, as not to admit of any. At the ſame time it will be apparent to every unprejudiced reader, how much, even in this part, Mr. Oliphant has endeavoured to ſtrain every fact to favour his particular opinion: Every real cancer he conſiders as incurable, and no diſeaſe he regards as cancer that is curable. Laying down then this axiom, the malignity of the morbid appearances in the preſent inſtance, which could not admit denial, he aſcribes leſs to the ſpecific nature of the malady than to preceding errors in its treatment. But in this attempt, like moſt people who deviate from the fair or candid line of conduct, he has placed himſelf in a moſt aukward dilemma, and by ſetting up his ſingle ipſe dixit, has oppoſed the opinions of ſome of the moſt reſpectable of the profeſſion. He has found it neceſſary, therefore, to omit altogether the names of the gentlemen formerly concerned with the caſe, and whoſe ſentiments he was made acquainted with by the patient, as well as Dr. Niſbet, ſufficing

ſufficing himſelf with giving Mr. Cline the appellation of a competent ſurgeon, and Sir James Earle of an eminent and experienced one, but taking no farther notice of any other perſon. Whether theſe gentlemen will be more offended by their names being formerly noticed as having merely ſeen the caſe, or now being declared ignorant of its real nature, and as having paſſed an erroneous judgment upon it, it is not my buſineſs to determine: their names became introduced by me in conſequence of the patient's own relation, and *that* with propriety, in order that they might have an opportunity of proving the authenticity of my ſtatement. I conſider them alſo, men of too much liberality and candour, and too much actuated by zeal for the improvement of ſcience, to ſuppoſe them capable of taking offence on ſuch grounds. The juſtice of their opinion I never could have a doubt of; for if ever there was a caſe of real idiopathic cancer, it was clearly exemplified in this inſtance: The diſeaſe had made its appearance at the cancerous, or critical period of life; it had occurred in a conſtitution ſubject to rheumatic complaints, the connection between which and future cancer is ſo well pointed out by the late Dr. Fothergill; and it had attacked more than one part of the ſyſtem, without any injury being urged as giving origin to it in this ſecond inſtance; it poſſeſſed alſo, every pathognomic appearance of cancer to the examination of the ſurgeon, and every feeling of it to the patient herſelf; nor to this hour would any doubt have even ariſen in Mr. Oliphant's mind reſpecting its nature, had it remained incurable. How trifling muſt his remark appear, which aſcribes its malignity to a cataplaſm of pigeon's dung, applied by the patient's friend! Such an application could have no bad effect, without a primary inherent cancerous tendency in itſelf.

From theſe remarks on the deſcription of the diſeaſe, I ſhall now examine the principle of cure, and on this principle no difference of opinion can exiſt. That a conſtitutional diſeaſe will at one time ſuſpend, and at another time entirely cure a local affection, is a fact which every tyro in medicine is acquainted with; but though acquainted with it as an acknowledged fact, much obſervation and experience are requiſite where this exertion of the powers of Nature is wiſhed to be imitated with ſucceſs. Indeed, the proper application of this circumſtance, leads to a ſucceſsful cure of moſt chronic diſeaſes; but in order to this ſucceſs, the means employed will require to be as varied as the nature of the diſeaſe, or chronic affection, which is to undergo the change. It is on this principle entirely, I conceive the cure of lues, or the conſtitutional venereal

venereal disease to proceed: the action of mercury is properly nothing more than changing it from a chronic to an acute form, similar to small-pox and measles, or exciting and continuing a phlogistic action or pyrexia, till the expulsion of the disease. This opinion I suggested fifteen years ago, in a treatise on that subject; since that time I have found no reason to change my sentiments, in spite of the numerous chemical hypotheses and evanescent theories of the day. The operation of remedies, I am clear, can only be justly explained on principles consonant to the laws of the animal œconomy; and the subjecting an animated machine to the laws of inanimate matter, is losing sight of the power of vitality, and the peculiar energies of life, its leading distinctions.

Agreeing then fully with Mr. Oliphant in the general principle laid down, that the constitutional disease, in the present case, was the means of curing the local one, the only question betwixt us is, Whether this constitutional disease was the effect of accident or art? In order to make it the former, the same disingenuous attempt is shown on Mr. Oliphant's part, as in the description of the morbid appearances; to detect which, it is only necessary for me to detail the particular course I employed.

When I was first called in to see Mrs. Craib, the case appeared, as Mr. Oliphant justly observes, a hopeless one, and palliation was all the relief to be expected: The opinion I then gave, will mark, at least, the formidable nature of the malady, and prove, that Mr. Oliphant had no *favourable* doubts at that period. I prescribed for her a diet drink and pill; the former, with a view to produce some change in the state of the fluids; the latter, for the particular purpose of exciting the action of the lymphatic system: an opiate was also enjoined to be occasionally used, as indicated by the urgency of pain. To the sore itself, a dressing of common cerate was applied, and the fermenting poultice laid aside at my desire, from the pain and irritation it constantly produces in every case of cancer. In this course the patient proceeded. Every day, according to her own account, she felt greater ease and abatement of pain, till the latter entirely ceased; and, as she expressed herself, she would not have known from her feelings any difference betwixt the ulcerated and the other breast. She could now lie with ease on the affected side, and use that arm with freedom; circumstances to which, previous to the commencement of this course, she was a stranger. The breast itself showed an evident shrinking of size; and Mr. Oliphant at that period observed, it was clear the progress of the disease was now *completely* checked. Reflecting on this favourable appearance, and desirous

ous that it might proceed more ſpeedily, I now ſuggeſted to Mr. Oliphant the propriety of employing frictions, ſo as to ſend the ſame remedies directly through the diſeaſed part, without the circuitous courſe of the ſyſtem at large. To this meaſure he objected, from the ſtate of the weather and their ſuppoſed inefficacy; confident, however, in my own opinion, they were applied according to my direction by the perſon mentioned in his ſtatement, as having formerly attended the patient as a friend. This practice was continued for the ſpace of ſix weeks, in the courſe of which time, not only was the regular ſhrinking of the breaſt conſpicuous both to that perſon and the patient, but ſeveral of the ſmaller tumours ſurrounding the diſeaſed maſs were entirely abſorbed; facts, for the truth of which I appeal to themſelves.—So completely ſatisfied was the patient of this, that not content with the friction at night, as employed by her friend, ſhe had recourſe to it herſelf in the day, and thus it was carried beyond what was neceſſary for the actual cure of the diſeaſe. The ſubſequent pleuritic attack, therefore, may be conſidered in part, perhaps, as the conſequence of her own imprudence, and it was attended with this farther miſchief of interrupting the courſe too ſoon. During this time the ſchirrous breaſt ſhrunk in proportion to the other, but never ſhowed thoſe ſtrong marks of yielding ſoftneſs till the courſe was at its heighth, at which period, even external ſymptoms of inflammation were conſpicuous on its ſurface; and when examined ſome time after by the gentlemen who ſaw her, it was ſo ſoft as hardly to bear the name of ſchirrous, and in a daily decreaſing ſtate. From this period, the management of the caſe, at Mr. Oliphant's ſpecial deſire, was left entirely to himſelf; nor was I either conſulted, nor, except from hearſay, knew what was employed. What I ſee of the practice, now ſufficiently ſhows me the impropriety of the applications; but as it is his wiſh to claim all the merit of the caſe to himſelf, and for that purpoſe his ſtatement was written, it is not my buſineſs to interfere with the ſubſequent treatment. From the detail of the prior courſe, it will be ſeen, that the progreſs of cure in this diſeaſe was gradual, regular, and bore a proportion to the activity of the means employed; that the relief experienced was from the commencement of this courſe, and that the conſtitutional diſeaſe was the conſequence of the means employed, although aggravated by the imprudence of the patient herſelf, in a degree beyond what was neceſſary, and perhaps, alſo, by the accidental cauſes which Mr. Oliphant takes notice of: The termination, however, has been favourable, and would have been much more complete, but for the intervention of theſe cauſes. On the whole, neither the patient

ſtent herſelf, nor any perſon who ſaw her in her worſt, and apparently incurable ſtate, will agree with the propriety of Mr. Oliphant's quotation from Amatus Luſitanus, that it is better to let the diſeaſe alone. In making this quotation, he might have gone even a good deal higher, for he will find the ſame obſervation a trite adage from the time of Hippocrates downwards, though, if it has any truth in it, it applies more properly to the early than advanced ſtage of the affection.

After this view of the caſe, it remains that I ſhould examine the analogous caſes, cited by Mr. Oliphant, in ſupport of his ſtatement. All his caſes are evidently of a ſcrophulous nature; they were cured, the worſt of them, by bark and carbonic acid, medicines which will always, in real cancer, do harm. The only one that applies in any degree to that of Mrs. Craib, from its occupying the ſame ſituation, is the caſe of Mrs. Oſborn; but here the proceſs of cure, when examined, is materially different.

In Mrs. Oſborn's caſe, Nature, as it were, ſhrinking from itſelf, and unable to ſupport a load, allows it firſt to loſe its vitality, and then to ſeparate; and on this ſeparation ſuch predominant weakneſs prevails, that the veſſels are even unable to contract, or prevent, exceſſive hæmorrhages, which continue for a length of time. The ſkin alſo, in healing, becomes puckered in the ſame manner as in the healing of other ſcrophulous ulcers. Nor, during this proceſs, is the axiliary ſwelling removed, but it continues for a vaſt length of time in a diſeaſed ſtate. Where, then, is the compariſon between this and Mrs. Craib's caſe? In the latter, a general increaſed action of the ſyſtem appeared; and from the moment of its appearance, the proceſs of abſorption was ſtrong and complete over the diſeaſe. No ſloughing or ſeparation took place, for the action of the abſorbents was equal to the removal; and the time in which this proceſs was accompliſhed, diſplayed the preſence of an active and daily increaſing cauſe, goading on Nature in her efforts, and threatening even injury to the ſyſtem, in order to its ſucceſs.

If inanition formed the principle of cure in ſcrophula and cancer, as contended for by Mr. Oliphant, it is evident theſe diſeaſes, among the lower claſſes at leaſt, ſhould be very readily cured; for Nature could never be at a loſs to have abundant opportunities of employing her exertions on the enfeebled, worn-out, conſtitutions of ſuch patients. But is there an inſtance of this ſort to be met with? Do not theſe diſeaſes make much more rapid progreſs amongſt the lower claſſes? And are not, alſo, the lower claſſes the moſt frequently attacked by them?"

Before

Before concluding, I ſhall only beg leave to mention, that when the ſtatement of Mrs. Craib's caſe was to be made out, I mentioned the propriety of it to Mr. Oliphant, in which he readily acquieſced. When it was afterwards made out, it was read to him by me, and he ſuggeſted one alteration, which, at his deſire, I adopted; viz. that the cure was effected "without ſloughing by an increaſed abſorption, in which it differed from any he had ever ſeen." According to every idea I could then form of a man's ſentiments, the account drawn up by me, with this one alteration, had his unqualified approbation, and I even then told him it ſhould go in our joint names. On this conduct I ſhall make no comment; the matter is before the public. Three more caſes will be publiſhed by me in the courſe of a few weeks. Theſe will ſufficiently determine the point, and be the beſt anſwer to all the ſcepticiſm diſplayed on the ſubject.

In bringing Mrs. Craib's caſe into notice, it was my wiſh to call the attention of practitioners, in a particular manner, to this diſeaſe; and in doing ſo, to ſhow,

1ſt. That the general principle of exciting phlegmonic action to a certain degree, and continuing it, is ſufficient to cure cancer, whether in the ſtate of ſchirrus or ulceration.

2d. That the preferable mode of exciting this action is through the medium of the lymphatic ſyſtem.

3d. That the lymphatic ſyſtem, once excited, is capable of producing abſorption, equal to the removal of the moſt hardened maſs of diſeaſe.

4th. That the cure is to be ſought for in a proper ſelection of thoſe ſubſtances which are moſt powerful in exciting the lymphatic ſyſtem, and which continue this excitement in a permanent manner. I am,

GENTLEMEN,

Your obedient ſervant,

St. James's Street, Dec. 17, 1800.

W. NISBETT.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IN a former communication I made ſome obſervations on the RIVAL INOCULATIONS, and contended that the Vaccine had not ſo great a degree of ſuperiority over the Variolous, as on firſt reflections might be imagined; for that facts might be enu-

merated, to shew that inoculated Small-pox is very rarely contagious.

With your permission I will now prosecute the enquiry according to promise. But, before I proceed to the facts which I intend to adduce, permit me to make a few preliminary remarks.

A part of the superior merit of the Vaccine Inoculation, it is said, consists — in the disease induced not being infectious.

That the Vaccine Disease should not infect the human species unless by contact, were I an advocate for the operations of contagions, I would account for; not because it is unattended with suppurating pustules, but from its being a disease incident to another animal.

That one inoculation should produce infection, and the other not, from the circumstance of suppurating pustules merely, is not satisfactory, unless external suppuration be regarded as the *sine qua non* of contagion; which is not the case, or we should no longer allow some other diseases, as typhus, dysentery, hooping cough, and the erysipelatous sore throat to be contagious.

From the evidence which has been adduced, there cannot exist a doubt respecting the security which this analogous disease affords against the contagion of Small-pox. And it may be reasonably supposed that mistakes will every now and then occur, which cannot fail to injure the practice, or the professional reputation of the practitioner. Then again, recent matter is more certain of producing infection than when it is dry; and fluid matter is, and probably always will be, more easily obtained by the generality of practitioners from Small-pox than from Cow-pox, by reason of the locality of the latter disease. And trifling as the operation of inoculation is, it is to be presumed that many parents will dislike those repetitions so often necessary to communicate the Vaccine Disease.

Small-pox and Measles, though they are diseases which affect the system, differ from other universal diseases, inasmuch as they are independent of *excitement*. And it is this circumstance which renders their *causes* less apparent than those which induce sthenic or asthenic diseases.

It would seem that Small-pox is not affected by impurity of air, for it rages with as great violence in villages as in cities.

Diseases of the system are preceded by predisposition.—We know that predisposition to general disease, is either a subtraction from, or an addition made, to that just degree of excitement which constitutes health. But with predisposition to Small-pox we are unacquainted; it nevertheless exists, with some exceptions, throughout the species, at one time of life or other;

other; and it may, for aught we know to the contrary, mount up to diſeaſe frequently, appearing with little or no aſſiſtance from external aids.

That Small-pox is more under the dominion of prediſpoſition than dependant on the foreign powers, appears to be demonſtrated; for we know that many perſons who are obnoxious to the diſeaſe, are not affected by it when an epidemic conſtitution of the air is preſent, and when expoſed to the operation of the whole force of a ſuppoſed contagion; yet, at ſome other period, when the ſtate of the air is unfavourable to this epidemic, and when they have had no communication with Small-pox patients for a great length of time, ſuch perſons become the ſubjects of it.

Prediſpoſition to Small-pox not being dependant on excitement, but of a nature peculiar to itſelf, can induce no other than a diſeaſe *ſui generis*; whilſt prediſpoſition, founded on a morbid degree of excitement, often terminates in diſeaſe different in form but not in eſſence. Thus we obſerve, that a diminution of excitement exiſting amongſt perſons of the ſame community, on their being expoſed to the application of a ſimilar foreign hurtful power, ſhall give occaſion to typhus, dyſentery, or ſome other diſeaſe of the aſthenic claſs. But I ſee no reaſon that contagion ſhould be reſorted to, to account for thoſe ſpecific diſeaſes originating in a *prediſpoſition* not founded on excitement, more than there is to refer to thoſe unknown undefined *ſomethings* to account for *plague*, *typhus*, or *dyſentery*; diſeaſes which are known to be dependant on the *effect* produced by the exciting powers, namely the excitement. And I am of opinion it makes not for Dr. Maclean's arguments to prove, that the *plague never ariſes from contagion*,* his ſuppoſition that Small-pox and Meaſles are the *effects* of ſpecific contagions from the invariableneſs of the diſeaſes induced, and from the conſideration that man is incident to theſe only once during life.

Whether man be incident to ſome diſeaſes which affect the ſyſtem only once during life, or to others which may affect it more than once, I preſume makes no difference, ſo far as relates to *contagions* as *cauſes*. The circumſtance adds nothing to the evidence that ſuch *powers* have no exiſtence; nor has it the leaſt tendency to prove, that any ſpecific contagion capable of inducing a diſeaſe *ſui generis* through the medium of the atmoſphere really exiſts.

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* A Diſſertation on the Source of Epidemic and Peſtilential Diſeaſes, by Charles Maclean, M. D.

Effects are often aſcribed to *cauſes* which have no exiſtence, or, if really exiſting, inadequate often to the production of thoſe *effects*; and it may frequently happen that Small-pox, inſtead of being attributed to *contagion*, might, with greater propriety, be referred to *a variolous epidemic conſtitution of the air*, operating with prediſpoſition ſo as to induce the diſeaſe.

Again;—In conſequence of the mortality occaſioned by caſual Small-pox, as is apparent from the London Bills having been conſiderably augmented ſince the introduction of inoculation; from a ſeeming coincidence of circumſtances, by no means regular, as will appear on enquiry, has this increaſe been aſſigned to a *cauſe* ſufficiently plauſible, as flattering popular prejudice,—*to the practice of inoculation.* Thus has the practice not had fair play; and by means like theſe, have envy, hatred, and malice been excited, not only between the poor and their rich neighbours, but between perſons reſident in the ſame houſe.

It will appear, from the extracts which I ſhall have occaſion to make from a valuable work, that the increaſe of mortality from Small-pox, commenced long before the introduction of inoculation; and, that it continued to increaſe by a regular progreſſion, until, from the prevalence of the practice, a decreaſe became obſervable. Although a prediſpoſition not founded on *excitement*, is of a nature unknown to us, yet are we obliged to admit its exiſtence, for the reaſons which have been aſſigned; and by this admiſſion we extricate ourſelves from thoſe difficulties in which contagions involve us.

Prediſpoſition to Small-pox, is a ſtate of the body not acquired from reſidence in any particular climate. Man, wherever placed, is endowed with it: the heat of Africa, and the cold of Ruſſia, are alike favourable to it.

The univerſality of Small-pox, and the regularity of its recurrence, are circumſtances, I think, unfavourable to the idea of its being propagated by *contagion*.

If a diſeaſe is dependant on *contagion* for its continuance, if the *contagion* be loſt, the diſeaſe would neceſſarily diſappear. It may poſſibly be obſerved, that the Variolous Contagion, from having extended its influence over the earth's whole ſurface, by taking poſſeſſion of every *pillow* and *bolſter*, *chair* and *table*, and every thing elſe, moveable and immoveable, cannot be deſtroyed either by accident or deſign; yet, one ſhould have expected, that ſome given degree of heat would have rendered it inert.

If Inoculated Small-pox be not infectious, how comes it that matter taken from inoculated patients, conveys the diſtemper with equal certainty as if it was taken from the natural Small-pox?

pox? has been aſked. Is it not morally certain, ſay they, that the *effluvia* part take of the ſame infectious quality?

To this moral certainty, I beg leave to reply, that *effluvia*, in ſome other inſtances, we know, will not induce diſeaſe; but if the matter of the effluvia be abſorbed, the diſeaſe is occaſioned.

Surgeons and nurſes may by accident inoculate themſelves with ſyphilis, in places appropriated for the reception of venereal patients; but the air of the hoſpital, which is ſtrongly impregnated with effluvia ariſing from the reſpiration, the ulcers, and the abſceſſes of the diſeaſed, is inadequate to produce ſuch an effect.

Practical anatomiſts reſpire an air loaded with putrid effluvia for many hours together, with impunity; whilſt a ſmall quantity of this fluid matter, if abſorbed, ſometimes gives occaſion to a diſeaſe which has proved fatal.

Facts are ſtubborn things, they make an impreſſion on the mind when arguments fail; that I may not incur the diſpleaſure of any of your readers, I will, without further preface, relate ſuch as will ſerve to vindicate a practice which is threatened with diſuſe; and to which we are under great obligations, from a charge which appears not to be well ſubſtantiated, and for theſe I am indebted to Dr. Watkinſon.*

"Medicus, a very eminent and experienced German phyſician, obſerves, in one of his epiſtles to Dr. Petit, of Paris, that the Variolous Contagion is ſo rarely propagated by the artificial diſeaſe, that, although a prodigious number of people have been inoculated, not more than *ten inſtances*, perhaps, can be reckoned, in which it has communicated the infection, notwithſtanding the pains which have been taken to diſcover that pretended quality of it."

"Miege, a celebrated inoculator, declares, that his own experience has afforded but one example of the contagion being propagated by the inoculated Small-pox, and that, that happened by contact, *per oſculum, ideoque proximum per contactum accidit.*"

"Sulzer, who appears to have had conſiderable practice in this art, aſſures Profeſſor Schroëder, of Gottingen, in a letter which he wrote to him in the year 1765, that he had not ſeen *a ſingle caſe in which the inoculated Small-pox had by contagion given the diſeaſe to another.*"

"A ſimi-

* An Examination of a Charge brought againſt Inoculation, by De Haen, Raſt, Dimſdale, and other writers; by John Watkinſon, M. D. Printed in 1777, for J. Johnſon, London.

" A ſimilar aſſurance is given by Dr. Odier, of Geneva, to the author of the *Journal de Medicine.*"*

" Mr. Holwell, who reſided upwards of thirty years in the Eaſt Indies, and whoſe account of the manner of inoculating the Small-pox in that country, ſhews the attention that he paid to this ſubject, informs us, that " notwithſtanding the multitudes that are every year inoculated there in the uſual ſeaſon, it adds no malignity to the diſeaſe taken in the natural way, nor *ſpreads the infection as is commonly imagined in Europe.*†"

But the following fact, atteſted by Dr. Schwenke, a phyſician of diſtinguiſhed reputation in Holland, is ſufficient, I think, to remove every doubt that may remain on this head.

" About the end of the year 1767, and the beginning of the year 1768, two hundred people at leaſt, were inoculated at the Hague, who, without much regard either to themſelves or others, frequented all places of public reſort, notwithſtanding which, no epidemic was produced, nor in the whole year did more than eight perſons die of the Small-pox; and of theſe, three died in the ſpring, one by inoculation, and two by the natural diſeaſe, which they had caught at ſome other place and carried with them to the Hague; the remaining five died towards the end of the year. *Vid. M. W. Schwenke Epiſt. in Cel. Sandifort. Biblioth. Med. Tom.* 6."

[The remainder of this Communication is obliged to be poſtponed at preſent for want of room.]

To the Editors of the Medical and Phyſical Journal.

Miſtaque cum veris paſſim commenta vagantur
Millia rumorum: confuſaque verba volutant.

GENTLEMEN,

THE rumours concerning the diſcreditable caſes of the inoculated Cow-pock lately at Clapham, were ſuch as to excite the attention, and provoke the inquiry, of perſons even little intereſted in the fortunes of the new practice: But from the part I have taken in attempting to introduce the Vaccine Inoculation, I found myſelf particularly called upon to relate ſome

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* Journal de Medicine, &c. Vol. XLII.

† An account of the manner of inoculating for the Small-pox in the Eaſt Indies.

ſome particulars, and to aſſign reaſons for thoſe unfavorable occurrences. I confeſs I was much diſappointed to find that the Report publiſhed in your laſt Journal, not only did not ſatisfy my mind with reſpect to the aſſigned cauſe of theſe unfavorable inſtances, but contained ſeveral aſſertions of great practical importance, which are at variance with the evidence of my own experience. Hence I thought it would be culpable conduct on my part, to withhold from the Public the adverſe evidence which I poſſeſs, ſincerely hoping that the communication of it will be beneficial, whether the concluſions in the Report be invalidated or not.

The following paragraph contains the moſt important aſſertions, which principally induced me to come forward on the preſent occaſion. "The gentleman," I am authorized to ſay, Mr. Buckland, "who performed this inoculation, candidly acknowledges, that the matter with which he had charged the lancet for this purpoſe, had been taken at a very late period of the diſeaſe, after a brown ſcab had formed, and had a purulent appearance at the time it was taken from the arm, conſequently had, by degenerating, loſt the power of giving the Cow-pox infection, and appears to have been the cauſe of all the miſchief that enſued."

Now, as the concluſions in the Report are principally built upon the kind of *Matter* employed, it is to my apprehenſion needful to aſcertain with preciſion, the origin, and many of the properties and circumſtances of this inoculated *Matter*, to which ſo much miſchief is imputed. Accordingly I find, on the teſtimony of the Inoculator,

1. That it was taken on the lancet, uſed in the firſt inoculation mentioned in the report, from two of the patients of that inoculation on *the tenth day*, and who underwent the diſeaſe favorably. This lancet had not been cleaned ſubſequently to the firſt inoculation, but it was not ruſty, and the matter on it was inſerted while fluid, within an hour after it was taken; and no other matter was taken on this lancet employed in the inoculation, but that from the two patients, as aſſerted moſt diſtinctly and uniformly to me by Mr. Buckland in three different converſations.

2. The matter uſed in the firſt inoculation, may be ſafely aſſumed to have been that of the genuine Vaccine pock, from the words of the Report, namely, "that there were no appearances in any degree deviating from the progreſs of the Cow-pox." It is however, I think, material to remark, that Mr. B's ſtatement informs me that one of the patients of the firſt inoculation had unfavorable ſymptoms, like thoſe of the ſecond inoculation, and that in ſeveral of the patients unfavorable ſymptoms

toms ſupervened ſoon after taking matter with the lancet on the tenth day, for the ſecond Inoculation.

3. It is next in order in this inveſtigation, to inquire into the ſource of the matter inſerted in the firſt inoculation, which was performed on Wedneſday, October 22. Here we find that Mr. B. collected matter on a *lancet*, from a patient at Clapham, under the care of Mr. L.* an eminent Practitioner in the city, on *the twelfth day* after inoculation; the patient having been inoculated on Saturday, October 11, and it was employed while fluid, within an hour after it had been obtained, and the Report ſtates, on "fifteen perſons, but only ſix took the infection."

4. It is of importance to be known, that Mr. L. above alluded to, on Thurſday, October 23, *the thirteenth day* after inoculation, a day later than Mr. B. "finding," ſays he, "the inflammation round the puſtule ſtill continuing bright, and *the fluid very thin*, I took a little on the point of a lancet for Mr. D. which not being ſcarcely viſible, he doubted of ſucceſs; with this he inoculated a child on Saturday morning, (November 1): The inoculation ſucceeded, and numbers have been ſince inoculated from this ſource, and one is under my care at this time, the eighth day." This laſt named patient was obligingly ſhown to me by Mr. L. on Saturday, December 13, then the thirteenth day after inoculation, having the uſual appearances of the veſicle in the incipient ſtate of deſiccation.

I am under the neceſſity of delivering evidence from my own obſervation, which contravenes the concluſion drawn in the Report; that as matter was taken late in the diſeaſe, and after a brown ſcab had formed, which had a purulent appearance, it "*conſequently had, by degenerating, loſt the power of giving the Cow-pock infection.*" Now my own practice, as well as that of ſome of my friends, inſtructs me, that purulent matter formed in a genuine Vaccine pock, not later than the 12th day after inoculation, can produce the genuine mild *Vaccina*. If analogy were needful to eſtabliſh this truth, I would appeal to the practice of the variolous inoculation; in whitch, I believe, no Inoculator heſitates to uſe purulent, as well as limpid, matter. However I do not mean to ſay, that it is proved that purulent vaccine fluid is equally efficacious as the limpid fluid; for ſuppuration ſo ſeldom takes place, that I have not facts to prove more than the harmleſſneſs and efficacy of ſuch matter where I have uſed it; but conſequently, that purulency does not neceſſarily imply, as aſſerted, *degeneration*.

To

* This patient of Mr. L. was inoculated with matter of the tenth day, from Mr. L——s', the ſurgeon, child.

To prove that the *Matter* uſed by Mr. B. was the occaſion of the anomalous vaccine caſes, it is ſtated in the Report, "that in two of the patients who are believed to have had the Cow-pock diſtinctly by the former inoculation, the ſame ſymptoms were unfortunately induced in attempting to procure Cow-pox fluid from them." If the lancet was in the condition I have above ſtated, I preſume to think that the enſuing inflammation, at leaſt partly, ariſe from the inciſions, or would have taken place, as is frequently the caſe, when the veſicle begins to dry, independent of any external irritation. Nor is this opinion diſcountenanced, but rather confirmed, by the *great proportion* of ſimilar anomalous caſes in the late inoculation; for examples are wanting of a particular morbific matter, which will produce on healthy parts the effects on the places inoculated ſo generally as related in the Report.*

Another fact, aſſerted on good authority, inclines me to the opinion, that if venomous matter, different from the vaccine, were propagated, the vaccine was alſo mixed with it, is, that in one or more of the caſes a genuine vaccine veſicle exiſted on one arm, while on the other arm of the ſame patient a conſiderable ulceration took place.

With reſpect to the five injunctions, as collected from a reſpectable authority, in the Poſtſcript of the Report, I ſhall only take notice of two of them:

1. "That the Cow-pox *fluid* ſhould be taken not later than the *ninth* day of the diſeaſe." This injunction was delivered, I believe, when the evidence of caſes of inoculated Cow-pock was extremely ſcanty, comparatively with the ſtate of it at this time, certainly in the proportion of 1 to 100. Among the great number of caſes which have fallen under my own obſervation, and from the ſtill greater number which have been communicated to me, not a ſingle unfavorable caſe, on the account of the matter being taken at any period between the ſeventh and thirteenth day, or even, in ſome inſtances, a day or two later, has been obſerved. And it cannot eſcape notice, that the caſes referred to in this paper, are evidences againſt the injunction. The Regiſters at the Vaccine Inſtitution, which ſeem adequate to the determination of this point, ſhow no difference in the degree, or kind of ſymptoms of the inoculated *Vaccina*;

* As to the inflammation of the punctured part and conſtitutional diſorder which occurs ſometimes in diſſection, ſuch a caſe does not happen, I believe, in more than one out of fifty or perhaps an hundred inſtances of puncture; and on the very firſt authority I am aſſured, it ſeems that the morbid effects ariſe ſometimes from the punctures even with a clean needle or knife, independent of animal matter.

whether the matter was of the eighth or of the eleventh and twelfth days; ſo that the Inoculators, as far as I know, give no preference. However, to ſatisfy my own mind, in the opportunities which occurred after reading the Report, I made ſome trials with preciſion, by inoculating one arm of each patient with *Matter* of the ſeventh or eighth day, and the other with *Matter* of the twelfth day; but I could obſerve no difference in the appearances of the Vaccine pock on each arm of the ſame perſon. Among theſe caſes were two young children, who were inoculated, under my direction, by Mr. Donelly; and to prove that the matter was equally efficacious, I ſhall ſtate, that with matter, on the eighth day, from theſe patients, taken on twenty-ſix lancets, and in the glaſs bottles* with ſpoon ſtoppers, invented by Mr. Lewis, the apothecary to the Vaccine Inſtitution, Mr. Carpue ſuperintended the inoculation of forty-two perſons in the army; of whom, twenty-five took the diſeaſe, which they underwent with the uſual mild ſymptoms, and without any perceivable difference in the ſymptoms depending on the age of the matter.

With reſpect to the ſecond injunction, I have already had occaſion to deliver the teſtimony of my experience.

Whether the preceding evidence be ſufficient to make out a Caſe manifeſting that the anomalous and ſevere ſymptoms *did not depend on the Matter uſed having been taken ſo late as the tenth day, from under a ſcab, and allowing that it was purulent*, I ſubmit to the deciſion of the medical public: Nor is it within my preſent deſign to bring into view other agents, which might occaſion the bad ſucceſs. I ſhall only juſt obſerve if that had been my deſign, I ſhould particularly have pointed out the probable conſequences of inoculating ſo many perſons with *Matter on one lancet*. At the ſame time it would have been but juſtice, to confirm Mr. Buckland's depoſition, by the extreme improbability of his taking *Matter* from any other ſource but his own patients, on the tenth day. As to the gentlemen who have written the Report, I think it would be injuſtice to their reſpectable characters, to ſuppoſe an apology neceſſary, where *the manifeſtation of truth is the object*.

For the ſatisfaction of ſome perſons, it may be needful to obſerve, that the preſent queſtions ought not to be allowed the weight of a feather in argument againſt the ſafety and efficacy of the Vaccine Inoculation, although they are extremely important for determining on what the ſucceſs depends, for avoiding hurtful agents, and for advancing knowledge of the animal œconomy. Nor will I, on any deciſion of the points at iſſue,

* Theſe bottles may be had at Meſſrs. Parker's.

iſſue, recall an aſſertion which I have already made, that "a perſon during the inoculated Vaccina has a greater chance of life than under the ordinary circumſtances of living." But this propoſition is ſuppoſed only to be true, provided: 1. The Inoculator poſſeſs the knowledge already attained. 2. That he apply that knowledge with ſkill and ſedulous attention. 3. That he have the command over, or can avoid, the agency of thoſe powers which experience has ſhown to be hurtful. 4. That the patient be obedient to the directions preſcribed. Hence, however, it is manifeſt, that a patient may have a dangerous diſorder, and even die under the inoculated Cow pock, and yet the Practitioner be blameleſs. Although I very much doubt whether any perſon has ever died of the inoculated Vaccina, the above requiſites being preſent, it would be unwarrantable to affirm, that death may not take place either from the Cow-pock or from intervening diſorders during the Cow pock; for Phyſic, even in its preſent improved ſtate, cannot always "hold Mortality's ſtrong hand;"—it does not yet "bear the ſheers of Deſtiny."

As to one particular objection to the new Inoculation, on the ſcore of the origin of the venom in the Cow, and the offenſive aſpect of the eruption; if *uſefulneſs* be here the object of contemplation, a gem will be ſeen under a deformed exterior,

> "Which, like the toad, ugly and venomous,
> Wears yet a precious jewel in his head."

I am, yours, &c.

GEORGE PEARSON.

Leiceſter Square, Dec. 24, 1800.

P. S. In a Note to the Report under examination, the change which *Matter* undergoes in the Vaccine and Variolous puſtules, when it becomes virulent, is termed *decompoſition*. If this term had not an allowed definite import, and would not be likely from the authority of the writer to be employed in an unmeaning, vague ſenſe; or, what is worſe, according to its import; it would not be worth while to notice the impropriety of its uſe in this place. This impropriety will be moſt ſpeedily perceived by the queſtion, *What is the kind of change which takes place?* Now, I anſwer, without fear of contradiction, in what the change conſiſts is utterly unknown; but that as it is quite as reaſonable to *imagine* that it conſiſts in a new *compoſition* as in *decompoſition*, I beg to uſe the term *change* or *alteration*, and diſcard the term *decompoſition*, leſt a thing unknown, by the imagination bodied forth, obtain "a local habitation and a *name*."

CRITICAL RETROSPECT

OF

MEDICAL AND PHYSICAL LITERATURE.

An Eſſay on Phlegmatia Dolens, including an Account of the Symptoms, Cauſes and Cure of Peritonitis Puerperalis & Conjunctiva, &c. &c. By JOHN HULL, M. D. 8vo. 370 pp. 6s. 6d. London. Bickerſtaff.

WE can recommend this work as giving a very full and elaborate hiſtory and deſcription of a diſeaſe incident to lying-in women, and commonly known by the name of *œdema lacteum*, or white leg.—The ſubject is treated of in the following order:

" 1. The *literary hiſtory* of the diſeaſe is given, together with a *review of the different theories*, that have been formed concerning it.

" 2. The *medical hiſtory* is given, and the *cauſes* and *cure* conſidered.

" 3. The *analogy* of this diſeaſe with *Puerperal Fever* (Peritonitis *puerperalis* Ill. Frank.) and *Rheumatiſm* is pointed out.

" 4. The *characters* and *ſynonyms* of the genus Phlegmatia with its ſpecies is preſented, and the proper place aſſigned to it in the noſological ſyſtem of the late Dr. Cullen."

In the literary hiſtory, which occupies 130 pages, the author has given copious extracts, and has frequently copied whole caſes from every writer ſince the days of Hippocrates, who has mentioned this complaint; and we ſhould be inclined to beſtow ſome praiſe on this part of the work, as an uſeful epitome for thoſe who wiſh to be informed of what has been written on the ſubject, if it was not ſullied with a degree of aſperity, and an unneceſſary attack upon Dr. Ferriar, a gentleman of acknowleged eminence in his profeſſion, and whoſe talents, as a man of letters, are of the higheſt order.

It is painful and vexatious to obſerve this contentious diſpoſition ſo frequently breaking the bounds of moderation and urbanity.

" *Reſt — reſt, perturbed Spirit.*"

The author has illuſtrated the medical hiſtory of the diſeaſe by ſeveral caſes, and amongſt the exciting cauſes he enumerates, " 1ſt. Contuſions, or violent exertions of the lower portions of the abdominal and other muſcles inſerted into the thighs and pelvis, and of the muſcles of the inferior extremities and contuſions of the cellular texture connected with theſe muſcles, during a tedious labour.—2dly. The application of cold and moiſture. — 3dly. Suppreſſion or diminution of the lochia, and of the ſecretion of milk. 4thly. Food taken in too large quantity and of a too ſtimulating quality, eſpecially when the patient does not give ſuck. — 5thly. Standing or walking too much before the arteries and veins of the lower half of the body have recovered ſufficiently from the effects

of

of the diſtention which exiſted during the laſt months of pregnancy."—The author believes the proximate cauſe "conſiſts in an inflammatory affection, producing ſuddenly a conſiderable effuſion of ſerum and coagulating lymph from the exhalants into the cellular membrane of the limb."

"I am induced to offer, by way of recapitulation, the following conciſe account of my notion of the formation, eſſence, &c. of Phlegmatia *dolens*: A patient, prediſpoſed to the diſeaſe, being ſubjected to the action of ſome, or all of the exciting cauſes abovementioned, the balance of the circulation is changed and an unuſual determination of blood to the lower part of the trunk, or to one or both of the inferior extremities takes place. Hence the arteries of the part more particularly affected, are ſtimulated to increaſed action; inflammation is produced, and a conſiderable quantity of ſerum and coagulating lymph is effuſed from the exhalants into the cellular membrane, which moderates the inflammation and prevents it from extending to the outer ſurface of the cutis. The inflammation and ſwelling are ſometimes more limited, but, in general, they (ſooner or later in different patients) are diffuſed over the whole of one limb, and not unfrequently the other lower extremity in a few days becomes affected in a ſimilar way.—Whilſt theſe appearances are obſerved in the limb, the whole ſyſtem exhibits ſymptoms of conſiderable pyrexia; and theſe febrile ſymptoms, in many inſtances, precede the topical affection. After ſome time, the ſymptoms of pyrexia and of topical inflammation ſubſiding, the general health of the patient begins to improve, and the ſwelling of the limb, inſtead of being tenſe, elaſtic, hot, exquiſitely tender and painful when touched or moved, as before, becomes of a natural heat, is ſtiff and numb rather than painful or tender, yields more eaſily to the finger, and retains the impreſſion for a conſiderable time; in ſhort, the intumeſcence now approaches more and more to Anaſarca or Œdema, and, for the moſt part, gradually diſappears.—The diſeaſe, occaſionally, has a different termination, as has already been related.

"The œdematoſe ſtate of the limb towards the decline of the complaint may be eaſily accounted for, upon the ſuppoſition that the power and action of the abſorbents is totally unaffected; for, after the exhalants have been ſo far over-ſtretched as to pour out ſerum and coagulating lymph, we may naturally expect, that they will be a conſiderable time before they recover their tone, and be as much contracted as in their natural ſtate; conſequently, till that period arrive, a larger quantity of ſerofity, eſpecially when the patient is in an erect poſition, will be effuſed from them into the cellular membrane, and accumulated in the limb, unleſs we prevent it by bandaging the limb, or increaſing the action of the abſorbents. From this view of the diſeaſe it appears, that the whole of the phenomena may be ſatisfactorily accounted for independently of any primary affection of the lymphatic ſyſtem of the limb. Whilſt, on the other hand, they cannot be explained independently on an original affection of the ſanguiferous ſyſtem.

"In

" SECTION THIRD.

" *Of the Cure of Phlegmatia Dolens.*

" In this complaint there are three periods, which require different modes of treatment, and which are more or leſs diſtinctly marked, both with reſpect to the ſyſtematic and topical affections, in different caſes. Hence, in delivering the method of cure, it becomes neceſſary to advert to theſe three ſtages.

" In the firſt, which may be ſtiled the *inflammatory phlogiſtic*, or *ſthenic period*, the affection of the ſyſtem for the moſt part conſiſts in an inflammatory diatheſis, or increaſed tone and action of the heart and arteries, both with reſpect to frequency and force; and the affection of the limb conſiſts in a ſtill more violent action of the arteries diſtributed to it, producing effuſion and an extreme degree of tenſion of the ſkin.

" For the removal of the ſyſtematic affection, the indications are,—

" 1ſt. To diminiſh the quantity of the circulating fluids.

" 2dly. To remove, or moderate thoſe irritations, to which the body is almoſt conſtantly expoſed.

" 3dly. To employ ſedatives.

" 4thly. To employ remedies, which determine to the ſurface.

" The 1ſt indication is fulfilled by blood-letting, purgatives and emetics.—Emetics are uſeful alſo as revulſives and by determining to the ſurface.

" The 2d indication is fulfilled by avoiding exerciſe of the mental faculties; by keeping the body quiet, and conſtantly in an horizontal poſition; by uſing a low vegetable diet, and diluting acidulated liquids; by keeping the bed-chamber cool, and avoiding too great a quantity of bed-cloaths, and by keeping the bowels gently open.

" The 3d indication is ſatisfied by employing remedies, which directly diminiſh the action of the heart and arteries, as digitalis, acids, &c.

" The 4th indication is anſwered by employing neutral ſalts, antimonial preparations and ipecacuanha, either ſingly, or conjointly, and ſtill more completely, by combining opium with one or more of theſe remedies, and by the uſe of the warm bath.

" For moderating the violent action of the arteries of the parts affected, local blood-letting by means of leeches, and bliſters or rubefacients are to be employed. For relieving the tenſion of the ſkin, emollient fomentations, liniments and ointments are to be applied: punctures, or inciſions, though ſometimes employed with this view, are rarely very efficacious, on account of the matter coagulating very ſoon after its effuſion.

" § 2.

" In the third, which may be named the *antiphlogiſtic*, or *aſthenic period*, the ſyſtematic affection conſiſts in univerſal debility, in a diminution of the tone and action of the ſanguiferous ſyſtem, and

in

in an impoverished state of the blood.—The local affection appears to consist in a relaxation of and increased effusion from the exhalants of the limb, and it is not improbable, that the action of the absorbents is sometimes diminished.

" For the cure of the affection of the system, the indications are:—

" 1st. To increase the general strength and the tone and action of the heart and arteries by bitters, tonics, stimulants and exercise, especially in a carriage.

" 2dly. To improve the state of the blood by a nutritious diet, adapted to the powers of the digestive organs.

" For removing the topical affection, the indications are,

" 1st. To lessen the effusion of fluid from the exhalants; which may be effected partly by the remedies used for the cure of the systematic affection, and partly by the application of a tight bandage, by the cold bath, or cold water, fresh or salt, dashed upon the limb; and by avoiding too much standing, or walking.

" 2dly. To increase the action of the absorbents of the limb; which is to be done by the application of heat, blisters, electricity and other stimulants: by friction with the hand, or a flesh-brush; by digitalis, squill, mercury, carbonates of soda, potash and ammoniac, &c.

" It is not sufficient, that the absorbents take up what is daily effused by the exhalants in this stage of the complaint; this will merely render the swelling stationary. It is necessary that they absorb considerably more, in order that the lymph and serum, accumulated during the inflammatory stage, may be completely removed, and the limb return to its natural size.

" § 3.

" In the SECOND, or *intermediate* PERIOD, the systematic affection is to be treated by the remedies pointed out as fulfilling the the 2d, 3d, and 4th indications in the 1st stage: But these are not to be employed so rigorously.—The topical affection is to be remedied by gently stimulating liniments, ointments, &c."

Before we proceed to the rest of the work, we take this opportunity of mentioning an application for this disease, which has been used with invariable success, for several years, at one of the best regulated lying-in hospitals in London, and where our readers will readily suppose, from the great number of women annually delivered there, that instances of the *œdema lacteum*, or *phlegmatia dolens*, are not very uncommon. It is the practice at that hospital, to apply flannel well soaked in hot vinegar to the groin of the affected limb, and to renew it frequently; and we are well assured that no other remedies beyond those necessary to keep the bowels regular are ever used, notwithstanding the fever, pain, &c which commonly accompany this disease.—The author next points out the connection and analogy subsisting betwixt *phleg. dolens* and *peritonitis puerperalis* in their histories, pre-disposing causes, exciting and proximate causes, and their methods of cure. Of the symptoms of the latter disease he has given a good description, and

and the following paſſage will give the author's opinion on its infectious nature, and identity with *Typhus*, neither of which he believes it is allied to.

" As far as my obſervation goes, Peritonitis *puerperalis* is not infectious. I have never ſeen a caſe, wherein I had reaſon to ſuppoſe, that the effluvia ariſing from the patient, produced puerperal fever, or typhus, or any other diſeaſe in another perſon, either directly or indirectly. The diſeaſe in queſtion frequently ariſes, where there is not the leaſt foundation for a ſuſpicion that infection has been applied. And I have, in more than one inſtance, delivered a patient in an advanced ſtage of typhus, without any ſymptoms ſupervening, that indicated an inflammatory affection of the peritonæum."

In the method of cure, the reader will perceive that no ſpecific plan is recommended, but the remedies are adapted to each particular ſpecies and habit.

" Some practitioners are, I believe, of opinion, that every caſe of a particular diſeaſe ought to be treated in an uniform manner, and hence they do not give themſelves the trouble of adapting remedies ſpecially to the different caſes that occur. Of this claſs, ſome probably may have excluſively adopted M. Doulcet's, and others Dr. Gordon's method of treating puerperal fever, according as they happened to become acquainted with one before the other, or to have an averſion to, or predilection for, the uſe of the lancet. If this be the caſe, theſe practitioners would do an eſſential ſervice to the public, by giving a full account of their ſucceſs. If this were done, I ſuſpect, that from the alleged facts it might be proved, that neither plan ought to be indiſcriminately adopted to the excluſion of the other.

" From what I have ſeen of this complaint, I am of opinion, 1ſt, that an emetic, adminiſtered early, will cure the diſeaſe in many caſes; 2dly, that general blood-letting, and briſk purging, may, in other caſes, be employed freely with ſucceſs; 3dly, that theſe two methods may, in ſome inſtances, be advantageouſly combined; 4thly, that in ſome caſes the diſeaſe may be cured without employing either general blood-letting, emetics, or briſk cathartics; 5thly, that other remedies, which have been neglected as uſeleſs and unneceſſary, or condemned as hurtful, may be joined with Doulcet's and Gordon's plans with very great advantage.

" With this impreſſion on my mind, I enter upon the conſideration of the cure of puerperal fever, although the plan I have to recommend is neither ſimple, nor uniform, nor nearly approaching to infallibility.

" The indications of cure, which ariſe in puerperal fever, reſpect either the ſyſtematic or abdominal affection. Thoſe which belong to the former head, are,

" 1ſt. To moderate the action of the heart and arteries.

" 2dly. To ſupport the action of the heart and arteries.

" 3dly. To prevent, or correct, the putreſcency of the fluids.

" 4thly. To palliate, or remove, urgent ſymptoms.

" Thoſe

" Thoſe which relate to the latter head, are,

" 5thly. To moderate and ſubdue the increaſed action of the peritoneal blood-veſſels, and thereby prevent the miſchief ariſing from extenſive adheſions, from the effuſion of fluids into the abdomen, from ſuppuration and gangrene.

" 6thly. To promote the abſorption of the effuſed fluids.

" 7thly. To favour the diſcharge of pus when formed."

The laſt chapter treats on the character, ſynonyms, deſcription, and diagnoſis of the *genus phlegmatia* and its ſpecies, and is a ſpecimen of the noſological abilities of the author.

MONTHLY REPORT of DISEASES,

Admitted under the Care of the PHYSICIANS of the FINSBURY DISPENSARY, St. John's Square, Clerkenwell.

From November 20 to December 20, 1800.

	No. of Caſes.		No. of Caſes.
Continued Fever	49	Hypochondriaſis	3
Small-Pox	5	Dyſpepſia	8
Eryſipelas	2	Gaſtrodynia and Enterodynia	8
Cynanche Tonſillarum	3	Hyſteria	4
Pneumonia	4	Epilepſy	3
Hæmoptyſis	2	Vertigo	2
Phthiſis Pulmonalis	9	Cephalæa	5
Cough and Dyſpnœa	44	Hemiplegia	2
Catarrh	8	Dropſy	9
Dyſentery	1	Aſthenia	25
Diarrhœa	4	Diſeaſes of Infants	14
Chloroſis and Amenorrhœa	10	Chronic Eruptions	10
Menorrhagia	6		

From the above liſt it will appear, that fevers of the typhoid character continue ſtill to prevail, with ſcarcely diminiſhed violence, among the lower claſſes in this metropolis.

For a very long period there has never occurred a ſeaſon that has been characterized by ſuch an univerſality and malignity of febrile contagion.

Many of the probable cauſes of this peculiar prevalence of contagion have been ſtated in more than one of our Reports; unfortunately, a principal of theſe cauſes, the want of food, is likely to grow ſtill more fatal and extenſive in its operation: what the circumſtances are which may have induced this want, it is far out of the province of a Medical Writer to inquire; but it is within his province, and even it is his indiſpenſable duty, to make known facts that are of the moſt preſſing importance, and that almoſt excluſively fall within the ſphere of his profeſſional obſervation. It is a fact, and a moſt miſerable fact it is, that a large proportion of the diſeaſe with which the poor in London are afflicted, ariſes from a deficient quantity of natural and wholeſome nouriſhment. To ſuch feeble, hungry, and emaciated wretches, the adminiſtra-

tion of drugs is farcical; it may be even regarded as cruel and inſulting: to thoſe who are aſking for bread, it is giving a ſtone. Not long ſince, the Author of this Report was called to a family who, he was told, had been attacked by fever; but after examining the ſkin, the tongue, the pulſe, the countenance, and the late hiſtory of his poor patients, he ſoon found that their pitiable condition was entirely to be attributed to their not having taken food for three days. He beheld a child with his eyes open; but, as far as it could be aſcertained from appearance, altogether inſenſible. Not the fainteſt veſtige of ſenſation, or power of motion, remained. His lower limbs had been for ſome time in a ſtate of contraction, but it was remarkable that this contraction was removed by expoſing them for a few moments to the vivifying influence of the fire. His mother lying beſide him on the ſame miſerable bed, although from a ſimilar cauſe herſelf unable to ſpeak or move, every other moment caſt a melancholy and anxious glance on the countenance of her famiſhed and expiring child. The writer has been particularly induced to enlarge more perhaps than is conſiſtent with the proper bounds, and the general intention of this article, with regard to the preſent afflicting ſtate of the diſeaſed poor, as a plan for their relief he underſtands is at preſent in actual contemplation.

The nature of houſes of recovery has been explained, and the urgency of their importance has been already inforced in one of our medical reports. From that high ſenſe of generoſity, for which the inhabitants of this great capital are celebrated, almoſt as much as for commercial induſtry, it is beyond all doubt that they will be able and willing to carry into ſpeedy and extenſive effect, an inſtitution that will conduce more eſſentially to the good of the lower claſſes of the community, and will redound more to the real honour of the higher, than perhaps any medical eſtabliſhment that has as yet been formed, or which even in future is likely to be conceived.

It is not amiable, nor is it reaſonable to believe, that mankind are ſo inſenſible as ſometimes they are repreſented to be; if they do not alleviate diſtreſs, in general it is becauſe they do not *ſee* it.

Let a perſon, however little diſtinguiſhed he may be for his kindneſs or humanity, accompany a phyſician in his melancholy round, among the ſick poor, and he will feel his heart yearn for their miſery, and will find his hand open for their relief.

It is neceſſary to remark, that in conſequence of wanting the ſupport of wholeſome food, and the other unhappy circumſtances of their condition, the poor in London are too frequently induced to ſeek a temporary relief from the ſtimulating operation of the worſt of ſpirits.* Seldom poſſeſſing reſolution of mind enough for the

* Such reflections as theſe, awakened by late ſubjects of actual obſervation, may recal perhaps to the memory of the literary reader, ſome melancholy paſſages in the Hiſtory and in the Letters of the Poetical Peaſant of Scotland, both of which have been lately preſented to the public by the hand of a writer whoſe

the more ſpeedy modes of ſelf-deſtruction, they in general are driven to the ſlower ſuicide of habitual inebriety. By the more eaſy and opulent, theſe miſerable beings may ſometimes be accuſed of a criminal improvidence with regard to the future; but is it unnatural, or even is it unwiſe for thoſe not to look forward to the future, to whom the future preſents nothing but an unmixed proſpect of daily increaſing miſery and deſperation?

W. W.

Red Lyon Square. J. R.

MEDICAL AND PHYSICAL INTELLIGENCE.

[FOREIGN AND DOMESTIC.]

Report of the Committee on the Vaccine Inoculation at Paris.

SINCE the 3d of Thermidor, the committee have communicated nothing to the public with regard to theſe inoculations. This long interval has not been loſt; the committee are of opinion that they have employed it to advantage.

The firſt experiments, as is generally known, were made with vaccine matter which had been ſent from London. But whether on account of its tedious conveyance hither, or the want of experience in the committee, as yet but little acquainted with this kind of inoculation, this matter, after having been uſed with ſome ſucceſs, at length periſhed in their hands. The arrival of Dr. Woodville, Phyſician to the Hoſpital for Inoculation at London, ſoon enabled the committee to reſume their experiments.

This celebrated inoculator, who was detained at Boulogne by the formalities neceſſary for obtaining his paſſport, had inoculated ſome children in that quarter. This opportunity afforded the committee the means of procuring matter in the ſpace of twenty-four hours, as freſh as it was poſſible to obtain. More children were inoculated in the preſence of Dr. Woodville, and others ſucceſſively ſince that time.

Theſe inoculations, performed with the matter received from Boulogne, have generally manifeſted a more regular progreſs, and more determinate effects, than thoſe which preceded them; and

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whoſe ſplendid and ſolid talents, with equal ſucceſs, have been employed in reſtoring the health of the living, and in embalming the memory of the dead. By ſome, Dr. Currie, in writing the life, may be ſuſpected of having thrown an undue luſtre on the character of the deceaſed Burns; but genius recently departed may be compared to the ſun, which never is obſerved to ſhine ſo beautifully as juſt after it has ſunk below the horizon.

the committee regard the experiments which they have made since that time as more to be depended upon. In all the subjects of these experiments, as well as in the first, the disease has been of the mildest kind: not so much as one unfavourable accident took place. At present the number of inoculations performed under the inspection of the commitee amounts to one hundred and fifty.

The committee have been no less industriously employed in putting under inoculation for the Small-pox, many of the patients who had before been inoculated with the Cow-pox, and whom they considered as having been all, more or less, infected with it.

Four of these children were immediately inoculated on the 3d of Fructidor, three months after the insertion of the vaccine matter. About the 15th, a second experiment was made upon four of them; and upon seven more on the 30th of the same month; about two months after their first inoculation. Lastly, on the 11th of Vendemiaire, four other children have been inoculated after the same interval.

Of the first four children, three have experienced not the smallest effect from the inoculation. The four who underwent the second trial, have also been totally unaffected with it. The same has been the case with the other seven children. On five of those who were last inoculated, and on one of the first four, some effects were observed about the place of insertion; which were, that some of them were inflamed, and that there ensued a local tumor, which terminated in suppuration. In one of those five children, (named Blondeau, who had been inoculated with vaccine matter, before the arrival of Dr. Woodville,) the local tumor was attended with a degree of fever. The others were entirely free from this symptom; and upon none of them was there any appearance of general eruption.

In order to ascertain the nature of the humour produced by this inflammation of the wounded part, the committee took some matter from one of the subjects of these experiments, and made use of it for inoculating two children who had never had the small-pox. The operation was followed by evident marks of variolous infection, such as is observed in the common process of inoculation, accompanied with manifest fever, and a general eruption. The committee are at this moment repeating the same experiment upon the other four children, in whom the insertion was followed by a small tumor; and it shall be renewed every time that the same appearance occurs.

Such are the facts which the committee have observed, since their last report to the public and the subscribers. They are far from regarding them as sufficient to establish any decided conclusion on the subject. They feel too sensibly the importance of the question submitted to their examination, not to consider it with all the deliberation, and all the circumspection which it requires; and their intention is still to continue their experiments. But there is ground for some strong inductions from the facts already collected; and the committee are of opinion that they do not violate the character with which they are invested, when they take upon them

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to make the following obſervations. 1. The vaccine affection appears to them to be of a nature diſtinct from that of every other kind of eruption, and particularly different from the ordinary Small-pox.

2. The vaccine affection appears to them to be of a nature the moſt benign, and which hardly deſerves to be called a malady. Not ſo much as one accident happened to the hundred and fifty ſubjects who have been inoculated.

3. This affection appears to them not to be contagious, either by the air or by contact. Children who kept company with one another during a long ſpace of time, were ſucceſſively inoculated, and the infection manifeſted itſelf in none of them before their inoculation.

4. This diſeaſe excites no general eruption. In all the experiments which have been made, no puſtules have appeared, except at the place of inſertion, and even there never more than a ſingle puſtule.

5. The Vaccine Inoculation is no leſs practicable than exempt from accidents, whatever be the age of the perſons on whom it is performed. Infants have been inoculated in the arms of their nurſes; others at the age of one, two, and three years, to the age of fifteen. Perſons of the age of forty, and even fifty years, have alſo been inoculated, and always with the ſame ſucceſs.

6. In fine, the committee have remarked a preſervative effect in the re-inoculations performed for the ſmall-pox. The nineteen ſubjects ſubmitted to the operation, have been inoculated with freſh pus, taken every time from a variolous infant who was preſent. The committee, for the purpoſe of rendering their experiments more deciſive, employed in many of the ſubjects very deep inciſions, ſuch as, according to the inoculators, neceſſarily occaſion a large eruption of puſtules. They even proceeded ſo far as to introduce, at different times, a great quantity of variolous matter into the inciſions, notwithſtanding which, not one of nineteen who were inoculated, had any thing like a general eruption. In fourteen, the inciſions were ſoon obliterated, without any ſymptom of complaint. In the remaining five, the inflammation can be conſidered in no other light, than as the effect of local irritation, produced by the puncture of the ſkin. The inflammation began the very day of the inſertion. This proceſs has been more rapid, and leſs regular than that of ordinary inoculation. Beſides, inſtances of the ſame effect occur in perſons, who, after having had the ſmall-pox, have again ſubmitted to inoculation. In a word, if ſome preſervative effect did not operate by the Vaccine Inoculation in thoſe who have ſubmitted to it, how ſhould it happen that the variolous matter introduced into their inciſions for the inoculation of the ſmall-pox, ſhould have excited (in ſome at leaſt) only a local and partial affection, whilſt taken from this ſource to be tranſmitted to infants not before inoculated with the Cow-pox, it has produced in the latter all the uſual ſymptoms of general infection?

Theſe preliminary remarks, which, without deciding any thing

on the ſubject, the committee ſubmit to the conſideration of the learned, coincide entirely with the reſult of the experiments made at Geneva, by Dr. Odier, and of which he gives an account, in a report lately publiſhed by the prefect of that department. In ſix hundred children inoculated with vaccine matter, the mildneſs of the diſeaſe, its regular and invariable progreſs, its characteriſtic of being void of contagion, and the abſence of every complaint ſubſequent to inoculation, were conſtantly manifeſted. One very remarkable circumſtance, at the ſame time, has afforded an opportunity of evincing its preſervative operation. An epidemic ſmall-pox, of a very malignant kind, having appeared at Geneva, where upwards of a hundred and fifty children were victims to it, and where ſeventy-ſix more have died within the laſt month, it was obſerved that the children who had been inoculated with the Cow-pox, were totally unaffected by the contagion, except about ſeven or eight only, who had contracted the infection before their inoculation, and in whom the ſmall-pox had made their appearance on the fourth or fifth day after the inoculation with the Cow-pox, which in conſequence of that accident became uſeleſs.

In the Name of the Committee for Vaccine Inoculation,

THOURET, Director of the Medical School.

COW-POX.

The practice of VACCINE INOCULATION, though of recent origin, has already forced itſelf upon the notice of the firſt profeſſional characters in this and the neighbouring kingdoms. Its advantages are too numerous to be detailed here; but it may be proper to obſerve, that the vaccine diſeaſe requires no preparative medicine, no change of regimen, no confinement, and is ſeldom attended with much indiſpoſition.

We admit that, comparatively, few have periſhed by Small-pox Inoculation; but it is conſiſtent with our experience, that numbers have been ſo dangerouſly ill, as to excite ſerious alarms for the iſſue of the complaint. Under the circumſtances of Vaccine Inoculation, no ſymptom of danger has ever been exhibited. The Small-pox is a diſeaſe of contagion. The Cow-pox cannot be communicated but by actual contact or inciſion; which circumſtance enables the inoculator to ſingle out any individual for the operation, without ſubjecting any other member of the family to the ſmalleſt riſk.

That the Cow-pox is a ſubſtitute for the Small-pox is now ſufficiently certain. The experiments which have been inſtituted to put the queſtion beyond all doubt, are numerous, concluſive, and ſatisfactory.

Impreſſed with a conviction of the truth of thoſe facts, and animated by no other motive than a ſenſe of duty, and a ſincere deſire to reſcue the lower orders of ſociety from the ravages of a contagion, which to them is ſo peculiarly diſtreſſing and fatal, the underſigned Surgeons are deſirous to introduce a diſeaſe infinitely more mild, and very certainly ſafe: They are therefore ſolicitous to recommend to the inhabitants of BRADFORD and its vicinity, the

the practice of Vaccine Inoculation; and they hereby inform the public, that they will attend at their own houſes every Tueſday and Friday morning, to Inoculate, gratis, the children of the poor; and Dr. Moſſman, ſhould any indiſpoſition occur, or other circumſtance requiring extraordinary attention, will give his joint assistance in carrying every perſon ſo inoculated, ſafely through the diſeaſe.

GEORGE MOSSMAN, M. D.
THOMAS JONES, Surgeon.
W. MAUD, } Surgeons.
THOMAS LISTER, }

Bradford, Dec. 4, 1800.

The following ſignatures are added to the teſtimonial in favour of Vaccine Inoculation.

Nathaniel Hulme, M. D.
Gilbert Blane, M. D.
William Blackburne, M. D.
Sir J. M'Namara Hayes, Bart. M. D.
Andrew Thynne, M. D.
Edward Fryer, M. D.
Sayre Walker, M. D.
Michael Underwood, M. D.
Thomas Garnett, M. D.
John Gibſon, M. D.
G. M. Burrowes
David Dundas
Thomas Farquhar
Henry Fearon
James Gilder
John Griffiths
James Higgins
Lewis Leeſe
Edward Leeſe
William Lynn
John Mackinder
Jonas Malden
Joſeph Millington
William Morris
John Pearſon
Thomas Rolph
John Ruſh
Stephen Woolriche.

Dr. BRADLEY will commence his Spring Courſe of Lectures on the Theory and Practice of Medicine, on Wedneſday, Jan. 21, 1801, at ſix in the afternoon.

Dr. BATTY will begin his Winter Courſe of Lectures on the Theory and Practice of Midwifery, and on the Diſeaſes of Women and Children, on Monday, January 26, 1801, at half paſt ten o'clock in the morning.—Further particulars may be known by applying to Dr. Batty, at his houſe, No. 6, Great Marlborough Street.

Mr. PEARSON will commence his Spring Courſe of Lectures on the Principles and Practice of Surgery, on Monday, Jan. 26, 1801, at ſeven o'clock in the evening, at his houſe in Golden Square.

Mr. H. LEIGH THOMAS propoſes delivering a Courſe of Lectures on Practical Surgery, in which the different operations will be performed, and the medical treatment fully explained.

The Courſe will commence on Monday, January 26, 1801, at ten minutes after eight o'clock in the evening, at his houſe in Lei-

ceſter Square, where further particulars may be known, or at the Anatomical Theatre in Great Windmill Street.

¶. We have inſerted the above at the requeſt of Mr. Thomas, and we conceive, that a courſe of Lectures which will embrace a full conſideration of the medical practice requiſite in Surgery, (a moſt eſſential part, and which has not been ſufficiently detailed hitherto) will prove of the utmoſt value and aſſiſtance to the ſtudent. The medical world is ſufficiently acquainted with the anatomical and profeſſional talents of Mr. Thomas, as well as his opportunities for illuſtrating his ſubjects from the collection of preparations of the late celebrated Mr. Cruikſhank, and which he has ſo conſiderably enlarged.

Mr. WILSON will commence his Spring Courſe of Lectures on Anatomy, Phyſiology, Pathology, and Surgery, on Jan. 19, 1801, at the Theatre of Anatomy in Great Windmill Street.

Mr. CHEVALIER's Spring Courſe of Lectures on the Principles and Practice of Surgery, will commence at his houſe, No. 20, in South Audley Street, Groſvenor Square, on Monday, Jan. 26, 1801, at ſeven o'clock in the evening.

Mr. STANCLIFFE, of Cambridge, Lecturer in Chemiſtry to the Middleſex Hoſpital, propoſes to deliver the ſame Courſe to an audience in Birmingham, in the courſe of the enſuing month.

Dr. T. A. MURRAY, of Greville Street, Hatton Garden, will ſhortly publiſh "Remarks on the Situation of the Poor in the Metropolis, as contributing to the progreſs of contagious diſeaſes; with a plan for the eſtabliſhment of houſes of recovery for perſons infected by fever."

We learn that the ſecond edition of Mr. PARKINSON's Chemical Pocket-Book, printed on a fine wove paper, and augmented by the addition of the lateſt diſcoveries, is expected to be publiſhed in the beginning of January.

TO CORRESPONDENTS.

Communications are received from Meſſrs. Cuſtance, Kynion, Jones, Macgarth, Bartley, Spry, Simmons, and Hill; and from Drs. De Carro, Moſsman, and Woodforde, which have been unavoidably poſtponed for want of room.

The great increase of original Communications has obliged us to defer an account of ſeveral valuable Books, and the Foreign Literature.

ERRATA.

Vol. IV. p. 514, l. 12, *for* conical, *read* crucial.
l. 15, *for* infraction, *read* impaction.
l. 35, *for* conically, *read* crucially.
p. 515, l. 39, before meaſurement, place the word *ideal.*

THE

Medical and Phyſical Journal.

VOL. V.] FEBRUARY, 1801. [NO. XXIV.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

AS an extraordinary fact, perhaps you may be induced to give a place in your Journal to the following morbid diſſection; the drawing is a correct repreſentation of the diſeaſe, taken by myſelf from the preparation. Inſtances have occurred of hernia through the diaphragm in the human ſubject, but theſe inſtances are extremely rare; and when they have been diſcovered, a mal-conformation of the parts has at the ſame time been detected, which luſus naturæ was probably, in moſt caſes, the primary cauſe of the accident. In the preſent inſtance, it did not appear upon diſſection, that the diaphragm was malformed, or any of the adjacent parts; but the hernia appeared to have been produced by the common cauſes of hernia. As the erect poſition of the human body is peculiarly favourable to the production of the different ſpecies of hernia which paſs through the ring of the external oblique muſcle of the abdomen, and underneath that portion of its tendon, denominated the ligamentum poupartii, ſo likewiſe is the horizontal poſture of different quadrupeds particularly favourable to the production of hernia of the diaphragm; but it does not appear that this morbid derangement has been detected by anatomiſts in the brute creation, at leaſt, I am not acquainted with any one inſtance upon record; that it ſhould not very often happen in the human ſubject, is not to be wondered at; indeed, ſo peculiar is the ſituation of the diaphragm, and ſo unfavourable is the erect poſition of the human body to its production, that, upon a curſory view of the ſubject, we might, with no ſmall ſhare of plauſibility, as well as probability, on our ſide, pronounce that it never could happen, unleſs there was ſome very extraordinary mal-formation of the parts immediately concerned.

The drawing which I have now ſent you, has been ſhewn to ſeveral medical men, who have thought it worthy to be preſerved. If, Gentlemen, you ſhould be of a ſimilar opinion, it is much at your ſervice. I am, &c.

JAMES HUME SPRY,
Member of the Royal College of Surgeons, London.

Aldersgate Street, December 30, 1800.

The animal was obſerved to be in very great pain, and was ſeized ſuddenly, without having ſuffered any previous injury from external violence. It cried frequently, with a peculiar voice not to be deſcribed; and during reſpiration, (which was extremely difficult) it made a noiſe, which appeared to me, ſimilar to that which a child makes who labours under cynanche trachealis. Soon after its firſt ſeizure, it vomited very much; and upon attempting to put a little liquid into its mouth, the animal's tortures ſeemed to be very much increaſed: From the time of its ſeizure to its death, it was about two hours and a half, or three hours.

The ſtrangeneſs of the animal's complaint, induced me to diſſect it; and the following is a deſcription of the appearances which refer to the drawing, by which it will be much better underſtood. It is to be obſerved, that all the parts which were not abſolutely neceſſary to explain the diſeaſe, were removed, and omitted in the drawing.

AAAA. The Lungs.

B. The heart on the right ſide: the pericardium was ruptured, and the heart was forced from its natural ſituation by the ſtomach, which was exceedingly diſtended with air.

C. The Stomach; this viſcus occupied the major part of the thorax; and the lungs were forced up to the ſuperior part of the cheſt, and compreſſed in every direction by it.

DD. The diaphrgam.

E. The Duodenum.

F. A maſs of omentum, with the pancreas and ſpleen paſſing with the duodenum through the tendinous opening of the diaphragm.

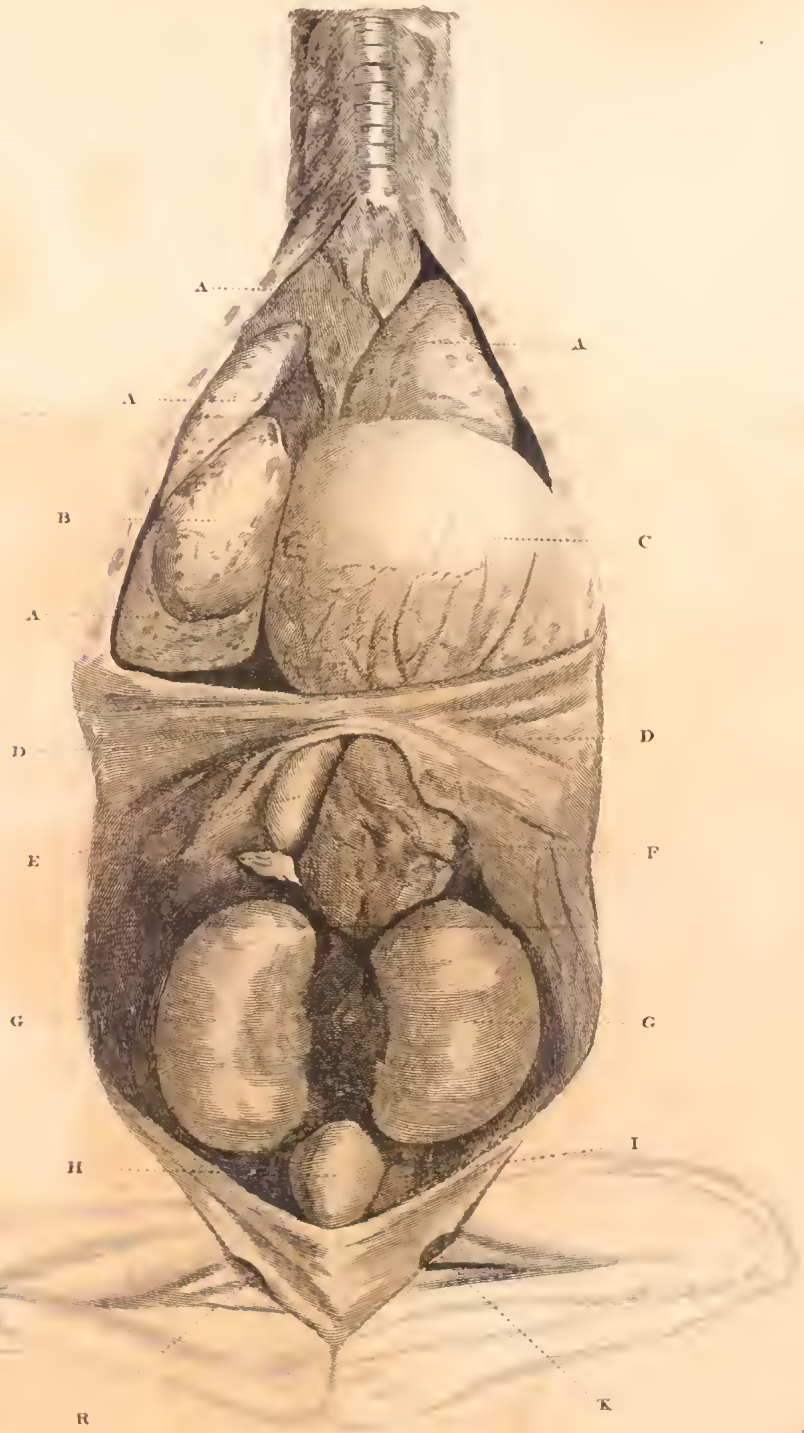
GG. Renes.

H. Veſica urinaria.

I. Inteſtinum rectum.

KK. Opening of the external oblique muſcle of the abdomen, commonly called the abdominal ring.

Hernia of the Stomach through the tendinous orifice of the Diaphragm in the Felis Catus domesticus



Spry del.

Skelton scalp.

Medical Jounal № 24.

Printed for R. Phillips № 71 St Pauls Church Yard

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

I Hope you will excuſe the liberty I am going to take, by pointing out to you what appears to me an error in your truly valuable Miſcellany; as ſcientific men, I think you will readily excuſe it, and if I am not very much miſtaken, will coincide with me in thinking, that the mode of arrangement adopted by ſome of your correſpondents, is not only irregular, but unworthy of learned men. I allude to the arrangement of diſeaſes in the different diſtricts in London. What can be more diſcordant to the eye, or to the ideas of a man who admires his profeſſion, and is a lover of ſcience, and who is acquainted with the great accuracy of the celebrated Dr. Cullen in his Synopſis Noſologiæ Methodicæ, as well as the Noſologiſts prior to his time, and particularly Sauvages, than to ſee a catalogue of diſeaſes put together without method, with half Latin and the other half Engliſh names? Surely, it would be as eaſy to adopt technical terms entirely, or quite reject them in favour of our native language. I confeſs that, in my opinion, technical terms ought ſolely to be uſed; and I am very certain that if the method of arrangement was more ſyſtematic, it would conduce much to the knowledge of diſeaſe, independant of ſhewing the number and quality of diſeaſes, which happen within certain ſtated periods, in any particular diſtrict of the metropolis, or any other place. Suppoſe, for inſtance, Dr. Cullen's method of claſſification was choſen, each diſeaſe ought to be placed on the liſt as it ſtands in his catalogue; and then the medical ſtudent, or the juniors in the profeſſion, would ſee at one view the nature of each diſeaſe, and the affinity they bear to each other.

Claſſis.		*Ordo.*	*No.*	*Genus.*	*Species.*	*Varietas.*	*No.*
1	Pyrexia	1 Febres	1	Tertiana			
			4	Synocha			
			5	Typhus	Petechialis		
		2 Phlegmaſiæ	10	Cynanche	Tonſillaris		
				Ditto	Maligna		
		3 Exanthemata	26	Variola	Diſcreta		
		4 Hæmorrhagia	37	Hæmoptyſis	Phthiſica		
2	Neuroſes	1 Comata	42	Apoplexia	Sanguinea		
3	Cachexiæ	2 Intumeſcentiæ	75	Anaſarca	Debilium		
		3 Impetegines	85	Syphilis			
4	Locales	1 Dyſeſtheſiæ	97	Paracuſis			
		3 Dyſcineſiæ	112	Paraphonia	Rauca		
		5 Epiſcheſes	127	Amenorrhœa	Emanſionis		
		8 Dialyſes	149	Pſora			

The above table will illuſtrate my meaning. The utility of ſuch a table muſt be evident to every thinking perſon; to the ſtudent it would be very valuable, as it would enable him to ſee at one view the nature of any diſeaſe; and his mind would be more familiar with the terms of his profeſſion; not to mention, that it would make him ſtudy the works of the immortal Cullen, and thoſe of other noſologiſts, at preſent too much neglected. When I firſt commenced the ſtudy of medicine, I found a table of this kind of the greateſt uſe to me; it very much aſſiſted me in acquiring a proper knowledge of Dr. Cullen's Noſologia Methodica; the terms became familiar to me, and when I was at a loſs for the definition of any particular term, by looking at my table I immediately ſaw the claſs and order, as well as the genus, and from the number of the genus which was prefixed to each, I made the reference to the Noſology for an explanation.

Thus, gentlemen, I have freely delivered my ſentiments upon a ſubject, which I think requires amendment; and if you think the above remarks may be of any ſervice to our junior brethren, you are at liberty to inſert this paper in your Journal. I am, &c.

JAMES HUME SPRY.

To Dr. BATTY.

DEAR SIR,

THE encloſed letter from Dr. Harriſon appears to me intereſting to the public, and particularly ſo to thoſe who are friends to the Vaccine Inoculation; if you think it proper for your publication it will gratify me to ſee it there, and I am ſure it will alſo be agreeable to our friend Dr. Harriſon. I am,

DEAR SIR,

With real eſteem and regard, your very humble ſervant,

Soho Square, Jan. 13, 1801. J. BANKS.

To the Right. Hon. Sir J. BANKS, K. B.

SIR,

I received a letter laſt night from a correſpondent in London, who informs me that you had expreſſed a deſire to be made acquainted with the particulars of a caſe of Cow-pox Inoculation, which occurred in this neighbourhood, and ſix months afterwards was followed by the Small-pox.

Upwards

Upwards of twelve months ſince, the nurſe-maid, and two children of my friend, the Rev. Marmaduke Allington, of Swinop-Houſe, were inoculated for the Cow-pox, with matter which had been ſent from a great diſtance. Neither of the infants were infected, but the maid had conſiderable inflammation on the arm, and although it was not attended with indiſpoſition, ſhe remains inſenſible to the variolous impreſſion. From the nurſe were inoculated a female ſervant, a third child, and Miſs Fanny Allington, who was then about five months old, had the operation repeated. The ſervant did not take the Cow-pox, but the children were ſuppoſed at the time to paſs through it in an eaſy manner. Though I did not ſee any of the patients before they were inoculated for the Small-pox, I had frequent converſations upon the ſubject with the attending ſurgeon, Mr. Sexty, who was always doubtful and diſſatisfied with the experiments. From him, and ſome other reſpectable friends, who have carefully enquired into the phenomena, I am informed, that in Fanny's arm the progreſs of the puſtule was unuſually rapid, and was characterized by an areola that was neither extenſive nor circumſcribed. Mr. Sexty is an accurate and reſpectable practitioner, but, on account of other avocations and his diſtant reſidence, the patients were only viſited occaſionally; and as there was no conſtitutional indiſpoſition, Mr. Allington paid them no particular attention. From theſe cauſes the appearances on the inciſed parts cannot be minutely detailed, but I think a ſufficient number of circumſtances may be collected, to enable us to come to a ſatisfactory concluſion on the ſubject. In both children the inciſed parts were inflamed, and a fluid was produced, but they had neither eruption nor illneſs. With matter taken from the arm of Fanny, the maid was again expoſed to the vaccine diſorder. From her ſeveral others were infected, and when the Cow-pox had been propagated through different ſubjects, Mr. Allington's other child was likewiſe inoculated. Six months afterwards they were all expoſed to variolous inoculation, and Fanny took the diſorder. She had a mild Small-pox with a moderate eruption. Hence it appears, that Fanny communicated a ſecurity againſt the Small-pox to others, although ſhe herſelf remained liable to its influence.

Several well atteſted inſtances are upon record, where variolous contagion from inoculated puſtules has produced a perfect Small-pox, and yet the ſubjects from whoſe arms it was taken had only a local infection, and afterwards paſſed through the Small-pox, either in the natural way or by inoculation. If it were neceſſary, I could corroborate this fact by detailing ſeveral caſes, which either occurred in my own practice, or have been

been communicated to me by gentlemen of veracity and judgment.

In the preſent inſtance I cannot undertake to determine, whether the failure was owing to a *peculiarity in the child's conſtitution, or to the matter with which ſhe was inoculated.* When the variolous, or vaccine, contagions are careleſſly dried and preſerved, or are taken from old puſtules, the nature of the poiſon is ſometimes ſo much changed, that it neither produces its peculiar diſeaſe, nor does it afford any real ſecurity. In other caſes, where a variolous puſtule ariſes upon the inoculated part, and paſſes through its different ſtages without producing any general infection, the failure is not to be imputed to the matter employed. In ſuch inſtances it muſt have been occaſioned by ſome unſuſceptibility, or unfitneſs to receive the peculiar impreſſion. Nurſes are liable to variolous eruptions, from attending upon children in that complaint. With them they are purely local; and when perſons who have never had the Small-pox or vaccine diſorders, remain proof againſt infection, it ariſes from ſome conſtitutional peculiarity, which takes place at the time, and with which we are juſt as much acquainted as with the change that is produced by the action of variolous or vaccine matter upon the general habit. Sometimes, though rarely, this diſpoſition continues through life; at other times it affords only a temporary protection; and it is worthy of remark, that caſes have occurred where the ſame perſon has been twice affected with the Small-pox.

Experienced practitioners are enabled to determine with confidence, whether the patient will continue to be exempt from the Vaccine and Small-pox Diſeaſes, by obſerving the appearances that take place in the inoculated arm. When a fluid is produced too ſoon after inoculation; when the pimple is too much elevated, has no areola, or only a ſmall and irregularly inflamed margin; or when it is accompanied by conſiderable efflorescence, and forms a ſcab before the uſual time, there is reaſon to conclude the perſon has only g .ie through the local complaint, and has received no protection againſt the conſequences of any future expoſures.

Whether the failure in this caſe is to be imputed to the matter employed, or to the child's habit of body, it affords no ſolid objection to Vaccine Inoculation, ſince the ſame want of ſucceſs has occurred in the Small-pox. It tends, however, to confirm the cloſe analogy that has been found to ſubſiſt between theſe two diſeaſes; and although, in the infancy of enquiry, it may be better to record facts than indulge in ſpeculations, I am inclined to believe, the more we become acquainted with their

their laws, the greater will be found the reſemblance between them.

I have the honour to be, with great reſpect and eſteem,

SIR,

Your much obliged,

And faithful humble ſervant,

Horncaſtle, Dec. 30, 1800. E. HARRISON.

P. S. About two years ſince we inoculated nearly one hundred perſons for the Cow-pox, with matter which you had obligingly provided for the Public Diſpenſary. In one inſtance, a ſmall tuft of hair, reſembling that on the child's head, was obſerved to grow from the inciſed part immediately after the deſquammation.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

AMONGST the many diſcoveries that have been made for the advantage of the public, none ſurely ever claimed greater attention and gratitude than that of the Cow-pox.

I mean not to enter into any medical diſcuſſions of this diſeaſe, but only to ſtate a few plain matters of fact, which have paſſed through my own hands or under my obſervation.

Having procured the genuine Vaccine matter, I firſt inoculated my ſervants; one of whom expreſſing a wiſh to know, by experiment, if it were an effectual preventive of the Small-pox, I permitted him to expoſe himſelf to its contagion, which he did, by lying with and inhaling the breath of a boy who was blind, and ſuppoſed to be in the agonies of death, with this cruel diſtemper. From this enterpriſe my ſervant felt no ill effect whatever. The mother of the boy, who was ill with the Small-pox, ſhortly afterwards ſickened with the ſame diſtemper, and ſoon became a deplorable object in it; when her huſband, who dreaded the malady, implored me to inoculate him with the Cow-pox; which I did, and he became an attendant on his wife and ſon, in perfect ſecurity: But be it underſtood, that till he had been inoculated for the Vaccine diſeaſe, he kept aloof from his family.

I have likewiſe inoculated others for the Cow-pox in a neighbouring town, whilſt there was in it, at the ſame time, a general inoculation for the Small-pox; when not one of my

patients

patients felt any effects from the latter, though in a conſtant communication with their infected neighbours.

Never have greater opportunities or more inſtances occurred, to manifeſt the certain and bleſſed effects of the Cow-pox, than in this pariſh and neighbourhood; for when I made my firſt experiments, the Small-pox had entered the village in a dreadful form, ravaging and making devaſtation in every quarter: but every one who had received the Vaccine inoculation, eſcaped unhurt. Whilſt a huſband has died by the former, a wife has been ſaved by the latter. And amongſt the many hundreds that have been inoculated in the neighbourhood with the genuine Vaccine matter which I introduced, not one inſtance has occurred in which it has failed of its beneficent and ſalutary effects.

I hope ſoon to hear, through the medium of your uſeful Journal, that the indefatigable and ingenious Diſcoverer has felt his Country's gratitude for his labours, as they could not have been carried to their preſent perfection without infinite pains and great expence: Firſt, to withſtand the medical cabals that generally attend ſuch diſcoveries; and, ſecondly, to render it ſuperior to the power of Envy and Detraction to bury in obſcurity its glorious and wonderful effects.

May not only England then, but all Europe, which now receive the benefit of it, unite to expreſs, by every poſſible means, their gratitude to the diſcoverer of ſuch a providential method of chacing from the earth one of its bittereſt maladies. I am, &c.

J. S. GALE.

East Woodhay, Hants, Jan. 9, 1801.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

AS I am very certain the contents of the following letter from Mr. W. Sharp, who is now retired from buſineſs, on the ſubject of the Cow-pox and its origin, is intereſting, I wiſh much to have it inſerted in the Medical and Phyſical Journal. I am, &c.

Tusmore, Jan. 16, 1801. W. FERMOR.

" Dear Sir,

" WHEN I had the pleaſure of meeting you the other morning, you aſked me, if the Cow-pox prevailed amongſt the cattle

tle in the North of England? I could not then anſwer your queſtion; but I enquired, and was informed by a letter this morning from Durham, that the diſeaſe is not known there among the cattle; and alſo, that they had heard of it in four counties only, namely, Glouceſter, Oxford, Bucks, and Northamptonſhire.*

"From circumſtances which have fallen in my way, I believe that the diſorder ariſes from infection brought to the cows by hands employed about the diſeaſed heels of horſes; and in conſequence, that it could not be known there, as the cows are univerſally milked by women, who have nothing to do in the ſtable.

"Wiſhing all poſſible ſucceſs to the Inoculation of the Cow-pox, which you have ſo meritorious a ſhare in promoting, I am,

"Dear Sir,

"Your's, &c.

Wicken Park, Bucks, Dec. 18, 1800

"WM. SHARP."

A Case of strangulated Crural Hernia, where the Operation succeeded after the Obstruction had continued Six Days.

By G. BORRETT, Surgeon, Great Yarmouth, and Member of the Royal College of Surgeons, London.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

ON Tueſday, Sept. 25, 1800, I was requeſted to attend Mrs. Warner, of this place, in conſultation with four medical gentlemen. We found her with a *Crural Hernia* incarcerated, vomiting a quantity of fæcal matter, with hiccough, cold extremities, and a quick, ſmall, but irregular pulſe.

The inteſtine had already been ſtrangulated five days, during which time the uſual treatment recommended for reduction was ſteadily but unſucceſsfully purſued. The tumour was about the ſize of a pullet's egg; and in conſequence of its not being tender to the touch, reduction was attempted, but without ſuc-

* It has been obſerved alſo in Somerſetſhire, Devonſhire, Wiltſhire, Berks, and ſome others.

ceſs. The operation appeared the only chance to ſave her life, which was urged to her, but ſhe would not conſent. The cold applications were continued, pills compoſed of Ext. Colocynth. c. and Calomel and a grain of Opium for a doſe, were preſcribed, and enemas of tobacco. At ten o'clock the following morning we viſited our patient. The enemas had acted powerfully on the ſyſtem, but produced no evacuation by ſtool; the vomiting of fæces continued. Being apprehenſive that ſhe could live very few hours, ſhe begged the operation might be performed, to which we agreed, as the only means of ſaving her life; although we now much doubted its ſucceſs, as her pulſe was become very feeble, and ſhe had the *facies hippocratica* ſtrongly marked.

Every neceſſary preparation being made, I proceeded to the operation; expoſed the faſcia, ligamentum Poupartii, the hernial ſac, and its contents; I then divided the ligamentum Poupartii, and afterwards, with ſome difficulty, paſſed Pott's Biſtory, and divided the ſtricture (which was conſiderable) at the mouth of the ſac. The rupture was Enterocele, and the portion of inteſtine included, which was the ſize of a nutmeg, appeared of a livid colour: Preſſure upon the inteſtine gave pain and excited retchings, which encouraged me to hope it had ſtill ſufficient life to have its action reproduced.

The ſac had deſcended for fourteen years, and more than once ſuffered inflammation; it was thickened in conſequence, and reſembled a cod's ſound, and completely adhered to the ſurrounding adipoſe membrane; a great portion of it was diſſected out. The wound was drawn together by ſutures; light dreſſings were applied, and ſecured by a T bandage. Small opiates were ordered every four hours, to allay the irritability of the ſtomach, and ſupport her ſtrength; and broth clyſters, after ſome days, reſtored the natural periſtaltic motion of the inteſtines. Mrs. Warner was the mother of thirteen children, and at this time in the third month of geſtation; ſhe did not miſcarry, and is now quite well: She wears a truſs. This caſe, and many others recorded, ſhew, that the operation for Hernia may ſucceed at almoſt any period of ſtrangulation, and encourage us never to deſpair of our patient.

I am induced to communicate the above caſe, becauſe Mr. Geoghegan, (No. xx. of your uſeful Medical Journal for October) in his "Strictures on the uſual Practice in ſtrangulated Hernia," repreſents the danger of the operation, abſtractedly conſidered, to be imminent, and appears an advocate for unlimited procraſtination; from which, in my eſtimation, the danger wholly ariſes, and becauſe I know of no clear account of the operation for *Crural Hernia*.

Whoever

Whoever will conſult Pott on Ruptures, will ſee the moſt judicious treatment and decided reaſons for his mode of conduct, reſpecting the operation. "There is no circumſtance," ſays he, "attending ruptures with ſtricture, in which more variety is found than in the time which they will ſafely admit to be ſpent in their reduction; ſome have been ſucceſsfully replaced at the end of eight or ten days, others have proved fatal in one." The attention of the medical world ought, therefore, to be directed to the *time* when the operation, in different caſes of ſtrangulated Hernia, ſhould be performed; from delay every thing is to be dreaded; and many valuable lives are daily loſt, that would indiſputably be ſaved. The Surgeon who has a caſe of ſtrangulated Hernia, ought not to waſte the only moments which might ſecure his patient's life by a *well-timed operation* in applying fomentations and placebos. Pott, p. 82 and 83, vol. ii. "There is not, in the practice of Surgery, a point which requires more judgment, firmneſs or delicacy, than to determine the preciſe time beyond which this operation ſhould not be deferred, and for a ſurgeon to conduct himſelf ſo as to induce a patient to ſubmit to it early enough for his preſervation. The two principal circumſtances which have moſt contributed to the infrequency of performing this operation are, a dread of great hazard from the operation itſelf, conſidered abſtractedly, and a fear of bringing a diſgrace upon it by having performed it too late; *ne occidisse, nisi servasset videretur.**—The firſt then is vaſtly greater than it ought to be, and is moſt frequently the cauſe of the latter; ſo that if the one can juſtly be leſſened, the other will not be likely to happen." Few experienced men then can doubt the propriety of operating early in ſtrangulated Hernia: After the moſt approved treatment has been regularly and conſiſtently tried without effect, and a judicious application of the taxis has been unſucceſsful, why ſhould the life of the patient be riſqued by farther delay of the operation, in which, comparatively, there is no hazard, if it be judiciouſly performed? I am juſtified in this poſitive aſſertion if any inference may be drawn from ſix caſes, four † of which (beſides the preſent) recovered. Of the other two, one died from the operation being too long delayed; and the failure of the other depended on the ſtricture at the mouth of the ſac not having been completely divided; a point in the operation which requires great care and certainty.

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* Celſus.

† From one of theſe patients more than a pound of diſeaſed omentum was cut off, without hæmorrhage or any other diſagreeable ſymptom.

I entirely agree with Mr. Geoghegan in the application of cold to the tumour, by cloths wetted in mixtures generating cold, as well as by expoſing the body to cold, where the patient can bear it; but I don't ſee how the palms of the hands ſhould be applied to the ſides of the Hernia denominated by writers Bubonocele, which is the term of the diſeaſe of which Mr. G. treats: In Scrotal Hernia indeed they may; but while the contents of the rupture are ſituated in the groin, it appears impoſſible that the palms of the hands ſhould be applied in the manner Mr. G. recommends, to expel air. The quotation which he makes from Mr. Pott, relative to graſping the tumour, is not only inaccurate, but the application is erroneous, it being in *Scrotal Hernia* Mr. Pott recommends that the tumour ſhould be graſped with one hand, to prevent the teſtes from aſcending and the inteſtine from deſcending; while, with the other hand, you endeavour the return of the tumour. Had Mr. G. read a little farther, he would have ſeen the following. "If the caſe be a Bubonocele, there will be no occaſion for endeavouring to graſp the tumour; but by continued moderate preſſure on it with the fingers, to endeavour the return of the piece of gut." Neither am I inclined to conſider the abdominal ring as a metal ring, which therefore "muſt be paſſive;" is it not more probable, that the diſorder in the inteſtine is originally produced by the ſtricture made upon it by the borders of the tendinous opening of the abdominal muſcle, and that the gut is in general perfectly ſound and free from diſeaſe before it becomes engaged in ſuch ſtricture, and that the inflammation of the inteſtine is the conſequence? If the abdominal ring is paſſive, how will Mr. G. explain the frequent reduction of ruptures during the relaxation and ſyncope occaſioned by the tobacco enema, and the ſtill more frequent reduction which takes place a few hours before death, from theſe very parts having loſt their tone, and no longer making reſiſtance to the return of the Hernia?*

In the operation for Crural Hernia, the epigaſtric artery and ſpermatic chord in the male, and ligamentum rotundum in the female, are parts lying in the way of the knife, and particularly increaſe the difficulty and hazard of the ſucceſs of this operation. Benjamin Bell, in his account of the operation in Femoral Hernia, diſcourages us by ſaying, "Whether the inciſion be carried directly upwards, or even obliquely outwards or

* Since the above Caſe, I am informed a female has died in Yarmouth of ſtrangulated Crural Hernia, to whom medical aſſiſtance was not called till ſhe was in articulo mortis; when upon applying the fingers to the tumour, a crepitus was heard, and the contents went up: The patient died ſoon after.

or inwards, these parts must generally be divided." Pott is not more clear and determined, and recommends, after the hernial sac, intestine, and ligamentum Poupartii, &c. are exposed, to endeavour the return of the intestine before the division of the ligament. Supposing every medical man perfectly acquainted with the anatomy of the parts concerned in Crural Hernia, I shall proceed directly to a description of the operation.

The patient being placed in a proper situation, the incision is to be begun above the tumour, laying bare the fascia and the sac. You then see the ligamentum Poupartii, binding down the sac, which is to be divided; but as you will have the epigastric artery, and spermatic vessels in man, crossing each other *immediately over* the tumour; and in woman the epigastric artery and ligamentum rotundum, much care must be taken.—The best mode is, to make a small incision between the fibres of the external oblique muscle, about *half an inch* above the ligament, and a director being passed *carefully and immediately under the ligament, and over the artery*, (which adheres to the ligament by cellular substance) to cut into the grove of the director. If, when this is done, you should find the stricture at the mouth of the sac, it must be divided *inwards* to the pubes, inclining Pott's knife rather obliquely downwards. In this mode you will avoid the artery, chord, and round ligament.

I conclude with apologies for taking up so much of your Journal; but if, through your means, the attention of the Medical World should be directed to an early operation in these dangerous cases, we shall be sufficiently rewarded by the many lives which will be saved. I am, &c.

Dec. 26, 1800. G. BORRETT.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE following communication may probably appear to you worthy of a place in your Journal, as exhibiting a concise view of the state of disease, during the last year, among the poor of our large and populous town. I am, &c.

Liverpool, Jan. 19, 1801. J. BOSTOCK.

Account

Account of the Diseases admitted into the Liverpool Dispensary, between Jan. 1, 1800, and Jan. 1, 1801.

Fevers	2603	Diarrhœa	723
Diseases of the Eyes	283	Hysteria	99
Sore Throat	221	Amenorrhœa	320
Inflammation of the Chest	78	Convulsions	32
Consumption	90	Insanity	5
Rheumatism	449	Debility	356
Erysipelas	18	Dropsy	107
Small-Pox	176	Scrofula	142
Measles	119	Rickets	4
Scarlet Fever	10	Syphilis	511
Thrush	55	Jaundice	48
Piles	57	Gravel	68
Hæmorrhagies	114	Worms	198
Catarrh	434	Eruptions and Diseases of the Skin	2287
Dysentery	383	Burns and Scalds	116
Head-ach and Vertigo	159	Abscesses, Ulcers, &c.	868
Apoplexy	8	Wounds, Fractures, and Dislocations	1013
Palsy	29	Cancers	19
Stomach Complaints	658	Ruptures	137
Epilepsy	17		
Dyspnœa, Cough	1523	Total	15165
Chin-Cough	39		
Colic	102		
Cholera	487		

Upon comparing the above List with the account of diseases admitted into the Dispensary in previous years, the first circumstance which arrests the attention, is a very large increase in the total amount of the patients. The numbers admitted in the years 1797, 1798, and 1799, are 12,162, 12,108, and 13,052, respectively, which gives an average for the three years of 12,441 per annum. In the year 1800 therefore an increase has taken place of 2,724, which is above one-sixth of the whole number. To account for so great an addition, we observe that the diseases which are classed under the head of Fever, considerably exceed their accustomed proportion; during the three preceding years the average number of Fevers was 1629; which gives an increase, in the year 1800, of 974. The causes of this additional frequency of Fever amongst the poor, may with great probability be referred to the circumstances which have been pointed out by your Correspondents in the metropolis, as producing the same effect in the sphere of their observations; I refer to a deficiency of food, a want of sufficient cloathing, and great dejection and anxiety of mind. The commercial spirit of Liverpool has happily prevented its inhabitants from feeling the distresses of the times in nearly so

great

great a degree as they have been experienced in many other places, yet even here the distress is widely diffused, and in many instances extreme.

The Small-pox and Measles of the year 1800, have been rather below the average of the three preceding seasons.

Under the head of Rheumatism, we find in the year 1800, that the number of cases has been considerably less than usual; the average of the three years being 580, whereas the above list indicates only 449. This diminution is obviously to be attributed to the unusual warmth and dryness of the season; to the same cause we may also ascribe a great diminution of the usual number of Catarrhal complaints, which are this year little more than one-third of their usual proportion.

Another important variation in the list of diseases for the last year, which must also be attributed to the peculiarity of the season, is the unusual frequency of the diseases of the intestinal canal. During this period, 1593 cases appear upon the books of the Dispensary, under the heads of Dysentery, Cholera, and Diarrhœa; which is above four times the average number of these complaints.

The only disease which remains to be pointed out, as affording any thing worthy of remark, is that class of ailments, which are entitled Debility; these, as might be expected, have during the year 1800 almost doubled their usual proportion. They consist in a great measure of old and needy females, who, unable to procure a livelihood by their labour, and chiefly dependent upon precarious charity, drag on a miserable existence, which in the present season of scarcity is rendered doubly wretched.

It may be proper to notice, that Liverpool, besides an Infirmary, contains a Lunatic Asylum, where a great part of the cases of Insanity which occur among the poor, are admitted; and a Charity for Lying-in Women, where Puerperal Diseases are relieved.

*** *The Editors are much obliged to* Dr. BOSTOCK *for the above Communication; they invite him to continue it annually, and will be glad to receive similar Communications from Hospitals and Dispensaries in every part of the kingdom.*

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I HATE controversy, and therefore approve much of the *present* conduct of your correspondent, Mr. Sheldrake, in dropping the subject of dispute between us. It is certainly the most

moſt rational mode of procedure, when he finds his attack no longer *defensible*, to get rid of it *in the best way he can*.* Whether his Anſwer, or my Reply, contains moſt *unprovoked*, *illiberal*, and *personal abuse*, I leave to your candid Readers to determine.

I hope, however, you will excuſe my taking notice of a very ſingular paſſage, principally directed againſt me,† in a latter communication from the ſame author. It is as follows.

"Gentlemen, I ſhall now, with your permiſſion, reſume the ſubject I hinted at in my laſt communication, viz. to ſhow, as far as my experience will ſhow, under what circumſtances, and at what periods of life, thoſe diſtortions of the feet, commonly called Club-feet, and more learnedly, *but more vaguely*, *termed* VARUS and VALGUS, may be cured."‡ With regard to the terms *varus* and *valgus*, I may remark, that they have been uſed not only by medical writers, but even by claſſical authors, and in common language, for at leaſt *two thousand years*, as appears from the following paſſage in Plautus: "*Aut varum aut valgum aut compernem*, &c. *Mil.* 3, 1, 128; and ſeveral others that I could produce, equally ancient. And during which *long* period they have been *invariably* uſed to ſignify the ſame things; *varus* when the toes are turned in, and *valgus* when they are turned out. It is certainly *one step* towards perfection in any language, when there are *two diſtinct species* of a thing, to have an appropriate name for each; yet it would appear, that there are ſome people ſo eccentric, or I may rather ſay, abſurd in their notions, as to *prefer one confuſed term*, *equally inapplicable to either species*, *to a proper and diſtinct name for each*. I would aſk Mr. S. what *ſtriking reſemblance* he can perceive between a Club and a Diſtorted Foot, let him take any CLUB he chuſes, from the celebrated Club of Hercules to that of a common *Cow-keeper*. I am, &c.

Paiſley, Jan. 10, 1801. R. WATT.

P. S. In the courſe of a month or two, I ſhall tranſmit you two caſes of *Vari*, which I have now very nearly cured; the one a boy between two and three years of age, the other between four and five. With theſe I ſhall alſo give you a deſcription and drawing of the machine I have uſed for that purpoſe.

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* Medical and Phyſical Journal, Vol. V. p. 9.
† Ibid. Vol. IV. pp. 192, 193. ‡ Ibid. Vol. IV. p. 493.

A Caſe

A Case of Apoplexia Hydrocephalica, with Remarks.

By T. Garnett, M. D.

Professor of Natural Philosophy and Chemistry in the Royal Institution of Great Britain; Honorary Member of the Board of Agriculture, &c. &c.

On the 19th of November in the evening, I was requested to visit Miss H. aged 16, whom I found in a comatose state; her breathing was rather strong and unequal, and when roused by considerable force she did not open her eyes, but put her hand upon her forehead, and cried out in a most piteous manner, "O my head!" Her pulse was 96, and rather full, and the catamenia, which had been regular for near two years, had appeared the preceding week. The patient when in health was of a very lively disposition and remarkably intelligent. About a year before, she had complained for a few days of pain in her head, which was removed by gentle purgatives.

For two days before I visited her, she had complained of considerable pain in the forehead, extending on each side to the temples. When I first saw her, I could with great difficulty get her to speak; but when at length she was sufficiently roused, she said the pain was so violent that she thought her skull was separating, and immediately relapsed into a state of insensibility. The pain had become more violent about two hours before, previous to which some symptoms of hysteria had appeared, which were succeeded by violent sickness and vomiting.

With a view of alleviating the present symptoms, I ordered her the following draught:

R. Tinct. opii gutt. xxv.—Æther. vitriolic ʒj.—Aqu. fontan. ʒß.—Syr. simp. ʒj. M.

And as there was some appearance of nervous irritability, I prescribed the following:

R. Spir. vol. fœtid.—Tinct. valerianæ vol. Spt. lavend. comp. aa. ʒij.

Of this mixture a tea spoonful was directed to be taken every three hours in a little water.

Nov. 20th.—She had passed a very restless night; her sleep was disturbed; and at intervals she complained much of pain in her head, shooting downwards towards her left shoulder. She had been very sick in the night, and had thrown up the drops twice, but not the draught. Pulse 100, full, and somewhat irregular. She seemed always much inclined to sleep, and when roused, almost instantly closed her eyes: She appeared however to have considerable aversion to the light, and desired that the

curtains of the bed might be close drawn, in order to exclude it; notwithstanding which, the pupils of her eyes were preternaturally dilated, and scarcely contracted on bringing a lighted candle near them. The pain in her head she said was very acute, and never left her for one instant. Her skin was very hot and dry; and as she had not had an evacuation of the bowels for two days, I directed a stimulant glyster, which brought away some hardened fæces.

As I had now reason to apprehend that I had to combat that terrible disease, the Apoplexia Hydrocephalica, I directed the application of a large blister between the shoulders, and one of the following pills to be taken twice a day:

℞. Calomel. — Pulv. digital. purpur. aa. gr. vj. — Extract. gentian. q. s. ut ft. Pil. vj.

I likewise ordered a drachm of *unguent. hydrarg.* to be well rubbed on the nape of the neck and behind the ears, three times a day. I also directed the immediate application of three leeches to each temple.

21.—The leeches had drawn a considerable quantity of blood, and she thought her head rather easier for some hours; but the pain was now as bad as ever; the comatose disposition had increased, and in the night she had been delirious. The pupils of her eyes were much dilated, and did not contract on the approach of a candle. Her pulse was 76, irregular, and somewhat strong. She did not complain of pain any where excepting the head.

22.—Much the same as yesterday.

23.—Pain of the head very violent and incessant; pulse only 60, but full and regular. She frequently lay a long time without breathing, and then sighed deeply. The pupils were still dilated, and she had an evident strabismus, the axis of the right eye being directed towards the nose. As she continued to be costive, the glyster was ordered to be repeated.

24.—Pulse only 52, very regular, not quite so much stupor, but the pain of the head very violent. Strabismus and dilated pupils as before. Had voided a considerable quantity of high coloured urine during the night; she had also begun to spit a good deal, but did not complain of soreness of the mouth.

25.—Pulse 60, regular and full; less stupor; had slept none in the night, but sighed frequently; complained much of the pain of her head, which she said was more violent than ever, and extended towards the *occiput*. As the blister between the shoulders was healed, I directed a small one to be applied behind each ear. She had ejected upwards of a pint and a half of saliva, and voided a large quantity of urine. In order to check the salivation, which I was apprehensive might go to a greater length than I wished, I directed eight grains of *kali sulphuratum* to be taken

taken every two hours in a little water. This, as I have elsewhere observed,* is always found very efficacious in checking or putting a stop to salivation. In 24, or at most 48 hours after the first exhibition of this remedy, the salivation becomes much abated. It has been reasonably supposed that mercury derives most of its activity from being in the state of an oxid; for crude mercury possesses little or no power, and in the form of mercurial ointment, the mercury is evidently oxygenated by continued friction. On the decomposition of the water in which the medicine is given, by the kali sulphuratum, sulphurated hydrogen gas is produced, which will be conveyed into the blood, where the hydrogen unites with the oxygen of the mercurial oxid, and forms water, while the sulphur will convert the metal into an ethiops or sulphuret, which is very inert.

With a view of affording some relief to the excruciating pain of the head, I directed a pill of opium to be taken at bed time.

26.—Pulse 80, very full and regular. Had slept none, but been delirious the greatest part of the night; pain intolerable.—Strabismus still remains, but the pupils contract a little on the approach of light. Salivation diminished. The quantity of urine not so great, but still considerable. The pills and mercurial ointment had been omitted since yesterday. To alleviate the pain, the temples and forehead were rubbed with ether; but this proving ineffectual, three leeches were applied to each temple, and one of the following powders was directed to be taken every three hours in a little tea.

℞. Nitri purif. ʒij.—Sacchar. alb. ʒiij.—Pulv. coccinell. gr. viij. M. et divid. in part. xij.

27.—The pain of the head was relieved for some hours after the application of the leeches, but had returned, though not quite so violent as before. Pulse 80, not quite so full. No perceptible strabismus, but the pupils continue dilated. The powders were ordered to be continued.

28.—Had slept a little, but still complained of great pain in the head. Pulse 84, rather full. Salivation gone, urine natural. As she nauseated the nitrous powders, an effervescing saline draught was directed to be taken every four hours.

30.—Pain of the head still bad, though not quite so acute. Pulse 80, not so strong. Has had a stool every day for the last three days. The medicines continued.

December 1.—Pain of the head very bad, but slept a little last

* Letter to Dr. Beddoes, published in his Considerations on the medicinal use and production of factitious Airs, p. 115. 2d edition.

laſt night. Pupils conſiderably dilated. Pulſe 96, of natural ſtrength, and regular.

The pills of calomel and digitalis were ordered to be repeated.

2.—Had two ſtools yeſterday. Slept a little during the night. Pain of the head and pulſe as yeſterday. The effervescing draught being very grateful, was ordered to be continued as well as the pills.

4.—Pain leſs acute. Pulſe 96, and regular. Pupils not ſo much dilated, and contract more on the approach of light. Sat up three hours yeſterday. The bliſters diſcharge well. The pills were directed to be continued, and the friction with mercurial ointment to be reſumed.

6.—Pain much leſs acute; has ſat up ſeveral hours. Pulſe natural, pupils not dilated; ſlept well. Remedies to be continued.

8.—Pain gone. Complains of nothing but weakneſs. The pills and friction to be omitted.

12.—No complaint but that of being rather coſtive.

R. Maſs. pil. Ruſi ʒjſs.—Calomel. ʒj.—Syr. ſimp. q. s. ut ft. Pil. xx.—Sumat j. vel ij. pro re nata.

31.—No return of the complaints.

During the worſt period of her illneſs it may be obſerved, that ſhe never aſked for any thing; but when food of any kind was offered her, ſhe took it very eagerly. She was not afflicted with vomiting, except during a few of the firſt days.

REMARKS.

From a view of the ſymptoms in the preceding caſe, there can be little heſitation in referring them to the diſeaſe which Dr. Whyte calls *Hydrocephalus internus*; but which Dr. Cullen, perhaps with more propriety, calls *Apoplexia hydrocephalica*, though I think this term not altogether unexceptionable, for reaſons which I ſhall afterwards mention.

All the ſymptoms enumerated by this accurate Noſologiſt, in his definition, were preſent in this caſe. "Apoplexia *(hydrocephalica),)* paulatim adoriens; infantes et impuberes, primum laſſitudine, febricula et dolore capitis, dein pulſu tardiore, pupillæ dilatatione, et ſomnolentia afficiens."*

The ancient phyſicians ſeem to have had but little knowledge of this diſeaſe, and it is even only within theſe few years that we have had any accurate accounts of it. Whether this diſeaſe is now more common than formerly, as appears to be the caſe with ſome others, I cannot determine, but am of opinion that it was generally miſtaken; and though in early medical writers, we

* Synopſis Noſologiæ Methodicæ, vol. II. p. 187.

we meet with deſcriptions of ſymptoms ſimilar to thoſe enumerated in the definition, they were thought in general to proceed from worms, and treated accordingly.

Dr. Whytt was the firſt who publiſhed any accurate deſcription of this diſorder, and of the appearances on diſſection. Afterwards, in the London Medical Obſervations and Inquiries, vol. iv. we meet with an excellent Eſſay on this diſeaſe, by the late Dr. Fothergill.

Moſt authors who have deſcribed it, agree in their account of its fatality. Sennertus ſays, "Si poſt dolorem vehementem, magna ſequatur pupillæ dilatatio, exigua ſanationis ſpes eſt."* Dr. Fothergill alſo ſays, "At the ſame time I muſt own to you, it is not in my power to ſuggeſt any probable means of curing the diſeaſe of which I treat; it has baffled all my attempts, both when conſided in alone, and in conſultation with the ableſt of the Faculty. All I pretend to do is, to exhibit ſuch an idea of this diſeaſe as may ſerve to make it known when it occurs in practice, and to form ſuch a prognoſtic of its progreſs and event, as may juſtify practitioners to themſelves and to the families in which ſuch fatal occurrences may preſent themſelves."† Dr. Whytt freely owns that he has never been ſo fortunate as to cure any one patient, whoſe ſymptoms denoted its exiſtence with any degree of certainty.

Within theſe few years I have ſeen ſeveral inſtances of this malady, and though I have only been completely ſucceſsful in the preſent and two other caſes, yet there are now upon record ſeveral ſucceſsful caſes; and I am in hopes that when we become better acquainted with the nature of the diſeaſe, the ſucceſsful caſes will counterbalance thoſe of a contrary deſcription. Since the time of Dr. Fothergill, this diſeaſe has attracted the attention of ſeveral eminent phyſicians, particularly of Drs. Percival, Haygarth, Dobſon, &c. who have all favoured the public with valuable obſervations on it. The beſt account of this diſeaſe is however given us by Dr. C. W. Quin of Dublin, in "A Treatiſe on the Dropſy of the Brain." He has given a number of valuable and highly important ſuggeſtions with reſpect to the treatment as well as the theory of this diſeaſe, and ſo accurate a deſcription of it, that practitioners will now be ſcarcely at a loſs in diſtinguiſhing it. A general outline of his opinions on this ſubject was given in his Inaugural Diſſertation, publiſhed at Edinburgh in the year 1779. Since that period, he ſays, that neither facts nor arguments have occurred of ſufficient force

* Lib. I. Part 3, Sect. 2. Chap. 26. Pract.
† Med. Obſ. and Inquiries, Vol. iv.

force to weaken the conviction of their truth; on the contrary, his theory can now appear supported by an added ſtrength of evidence, which minute attention to the ſubject has enabled him to draw from books, and obſervation in a variety of caſes.

Within theſe laſt ſix years I have ſeen ſeveral inſtances of this diſeaſe and though only in the caſes I have mentioned; have I been able to effect a cure, yet in two others the ſymptoms were ſo much alleviated by what is generally called the antiphlogiſtic plan, conjoined with mercurials and digitalis, that I had great hopes of their recovery. But the misfortune is, that a phyſician is generally conſulted after the inflammatory ſtage is paſt, in which alone any good can be done.

Since Dr. Whytt favoured the world with his excellent hiſtory of this diſeaſe, I think it has been nearly a general opinion that children are almoſt the only ſubjects liable to its attacks, and chiefly thoſe between the fourth and tenth years of their age; and I am of opinion that the ſymptoms which indicate the preſence of this diſeaſe, ſeldom ſhow themſelves in an advanced period of life, but are much oftener met with in infants; yet from the obſervations of Dr. Quin and my own experience, this diſeaſe does not by any means appear to be confined within the limits juſt mentioned. The ſubject of this caſe was ſixteen. I had one patient who was thirty years of age, and another thirteen. Dr. Quin relates ſome caſes of patients forty years of age, though ſuch inſtances are certainly not very common in the uſual courſe of practice.

The proximate cauſe of this diſeaſe has hitherto been involved in conſiderable obſcurity, and conſequently the practice muſt have been guided by vague and uncertain principles. A due conſideration of the various circumſtances which preſent themſelves in this diſeaſe, together with the appearances on diſſection, would induce us to ſuſpect, on very probable grounds, that the diſeaſe depends upon, and is generally, if not always, accompanied by a plethoric ſtate of the veſſels of the brain, occaſioning a conſiderable degree of inflammation, and generally, (though not always,) producing an extravaſation of watery fluid before death. As proofs of the exiſtence of this inflamed ſtate of the veſſels of the brain, I beg leave to offer the following circumſtances. In all caſes where blood has been drawn, it exhibits the ſame appearance as in caſes which are undoubtedly inflammatory. In ſome of the caſes which fell under my obſervation, the blood had this appearance in as great a degree as I have ever obſerved in pleuriſy. The acuteneſs of the pain and fulneſs of the pulſe likewiſe countenance this ſuppoſition; but what amounts almoſt to a demonſtration, is the aggravation of the ſymptoms from the exhibition

hibition of ſtimulants; and the relief which in the firſt ſtage of the diſeaſe, always attends the antiphlogiſtic or debilitating plan; both of which were ſeen in the caſe juſt related. The appearances on diſſection likewiſe confirm this. Dr. Quin mentions the appearances which preſented themſelves in the brain of a young woman who died at Edinburgh in the year 1777, and that of a boy attended by his father ſome years ago in Dublin.* In both of theſe caſes, the blood veſſels of the brain were ſo unuſually diſtended, that the whole cerebrum and cerebellum reſembled an anatomical preparation in which the utmoſt force of injection had been employed. What is very remarkable in theſe caſes, is, that though the ſymptoms preceding death were ſo unequivocal, yet in both caſes, to the aſtoniſhment of thoſe who were preſent, and who expected to find a conſiderable quantity of water in the cranium, none could be diſcovered.

In four other caſes mentioned by Dr. Quin, where the quantity of effuſed fluid found in the ventricles was conſiderable, there were ſigns ſo viſible of an increaſed flow of blood to the brain, that in all of them the veſſels were remarkably turgid, and in moſt of them a great degree of inflammation had actually taken place.

The accurate Morgagni alſo relates ſeveral inſtances in which the ſymptoms of this diſeaſe had been preſent, and where, upon diſſection, evident marks of morbid accumulation, and of an inflammatory ſtate of the veſſels of the brain, had appeared.†

All theſe circumſtances ſtrongly tend to confirm the ſuppoſition that the ſymptoms, particularly thoſe which appear in the firſt ſtage of *Apoplexia Hydrocephalica*, depend upon a plethoric and inflammatory ſtate of the veſſels of the brain. And though in many caſes, upon diſſection, a quantity of fluid has been found in the ventricles of the brain, yet may not this be looked upon as a conſequence of the diſeaſe, rather than as the cauſe of it? And is it not probable that this watery effuſion does not take place till the veſſels have been oppreſſed for ſome time by the exceſſive congeſtion of blood, and in conſequence of this, and the violent excitement, have loſt their tone; whence the aqueous fluids are diſcharged in conſiderable quantities into the adjacent cavities, while the abſorbents, probably weakened by the ſame cauſe, are unable to abſorb

* Quin on Dropſy of the Brain, p. 50.

† Vide Morgagni de Cauſis et Sedibus Morborum, Epiſt. i. Art. 2, Epiſt. vi. Art. 6, and Epiſt. i. Art. 14.

abſorb the fluid as faſt as it is effuſed? It appears to me even doubtful whether the ſymptoms which generally ſhow themſelves in this diſeaſe, depend upon the effuſed fluid. Many of them undoubtedly do not; and in the two caſes related by Dr. Quin, "all the ſymptoms that generally attend this diſeaſe were preſent, and yet upon diſſection, to the aſtoniſhment of the ſpectators, who were prepared to find a great redundancy of water within the cranium, none could be diſcovered in any part of the brain." Surely, the name *hydrocephalus* is not applicable to ſuch caſes.

In every caſe therefore, it would be proper in the firſt ſtage, if no ſymptoms particularly forbid, to uſe the debilitating plan to a conſiderable extent. I have made uſe of it in three caſes which have been cured, and have ſeen others much relieved by it; at the ſame time however it muſt be noticed, that the other remedies ſoon to be mentioned, were adminiſtered, for the diſeaſe generally runs on ſo rapidly to its fatal period, that I think it would not be juſtifiable to neglect any of the means likely to arreſt its progreſs.

In ſtrong ſubjects, eſpecially thoſe who have attained the age of puberty, general bleeding may be uſed; but I ſhould rather prefer local bleeding, becauſe eventually a great degree of debility comes on; and it ſeems probable that the accumulation in the veſſels of the head may be moſt effectually relieved by evacuations made as near the part as poſſible. I am convinced, that there often exiſts, not only in this diſeaſe but in ſome others of the inflammatory kind, a local inflammation without much general ſthenic diatheſis; and when the veſſels have taken on an inflammatory action in any part, general bleeding may be employed to ſuch an extent as to weaken the ſyſtem very much, without conſiderably abating the increaſed action, while local bleedings, eſpecially after one general evacuation, often produce a ſpeedy ſolution of the inflammation. This is the caſe particularly with the acute rheumatiſm.

In ſome caſes it might be adviſable to open the jugular vein, or even the temporal artery, but I have never yet ſeen either of theſe operations performed in this diſeaſe. As in almoſt all caſes, coſtiveneſs takes place, and aggravates the ſymptoms, it will be right to keep the bowels open by means of purgatives exhibited by the mouth, or ſtimulant glyſters. In all caſes I have had recourſe to bliſters, and I think with advantage. Where it has not been objected to, I have applied a bliſter to the whole head; in other caſes I have directed them to be applied behind the ears, or between the ſhoulders.

The greateſt chance of cure is during the inflammatory ſtage, and by means of the antiphlogiſtic regimen carried to its

its fulleſt extent. Whether in this ſtage much is to be expected from mercurials, I cannot ſay. They are highly ſpoken of by Drs. Percival and Dobſon in the Medical Commentaries; and on account of this reſpectable authority, I have always preſcribed them, as ſoon as the nature of the diſeaſe could be aſcertained. That mercurials have been employed with ſucceſs appears likewiſe from the teſtimony of Dr. Moſeley.* Alſo from that of Drs. Hunter and Haygarth.† Is it not probable that this remedy may produce its good effects by exciting the action of the abſorbents, and thus enabling them to take up the extravaſated fluid? and would they have produced any good effects in the two caſes related by Dr. Quin, where there was no watery effuſion? The digitalis being one of the moſt powerful diuretic remedies with which we are acquainted, is a very proper remedy in this diſeaſe; and I think I have found that its diuretic effects are much more certain and powerful, when conjoined with mercury. The digitalis likewiſe claims attention on other grounds. It ſeems to poſſeſs the power of diminiſhing the action of the arterial ſyſtem in a very remarkable degree, and is therefore indicated in the inflammatory ſtage.

From the attention which phyſicians have of late years paid to this diſeaſe, we ſhall I hope be ſhortly in poſſeſſion of ſufficient facts to eſtabliſh a rational theory of it, which will lead to a ſucceſsful plan of cure. Should theſe remarks contribute ever ſo little to the attainment of ſo deſirable an end, I ſhall be highly gratified.

THOMAS GARNETT.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

BY enquiry and diſcovery, the condition of man is improved; and by the continued application of talent and induſtry to the art of healing, it is to be expected that much will be atchieved. The old fabrics of phyſic will undergo a cloſe examination; the rubbiſh will be removed, and the valuable materials only will be ſuffered to remain: the myſterious pe-

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* London Medical Journal, Vol. vi. p. 113.

† Medical Obſervations and Inquiries, Vol. vi.

dantry of the antient schools, and the blind devotion to antient systems, will be doomed to contempt; and medical opinions will command veneration, not because of their antiquity, but because they are proved to be true. The professors of medicine are now acquiring additional knowledge of the mechanism of the human system; and by the aid of observation and experiment, they are pursuing inquiries which will lead, perhaps, more directly to the cure of disease. The true end of science is the production of new powers, and the means of applying them to useful purposes; and the unfolding of powers, which will infallibly lessen the accumulated mass of human evil, is an object of high importance. The votaries of medicine then, should never be idle; for industry or accident may eventually teach them to subdue maladies, which now elude every exertion of their art. There was a period when *ague* and *syphylis* were incurable: the antidote to both is now well known. It is certainly compatible with probability, and I believe it to be true, that Nature holds a remedy for every evil by which we are assailed; and, perhaps, the time is not far distant, when there will be a discovery of powers, which shall very generally obviate the fatality of *fever* and *pulmonary consumption*. In the primary stages of *phthisis*, the *digitalis* certainly approximates to a specific; and, perhaps, when properly administered, or when aided by proper auxillaries, it is possible that the plant may operate as a curative agent, even in the advanced stages of that disease. *For fever there is no remedy.* In this island, at least, there never has been any power employed, which could, with any certainty, arrest the progress of *fever* for a single day. If this observation be consistent with universal experience, let it apologize for the freedom of the subsequent discussion: If the progress of intellect be daily productive of beneficial inventions, surely, a science which embraces so large a portion of the fate of man, cannot be stationary. If the combined ravages of *fever* and *pulmonary consumption* are destructive of more than half of those who perish by disease, it is very certainly an object of much moment to obviate their fatal tendency; and the accomplishment of this end, ought alone to be the limit of inquiry. The extended use of that invaluable plant, which is found to govern the heart, and to exhibit powers singularly curative in certain states of *pulmonary consumption*, is a recent discovery; and is it impossible that there also exists a power completely subversive of the phænomena of fever? This is an inquiry of extreme importance, and nothing can be lost by pursuing it. It is known that the presence of *fever* is constituted or indicated by an increased action of the sanguiferous system; but it is not known what is

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the remote and exciting cauſe of this morbid action; nor is it known why it ſhould be ſo permanent. It is, I believe, conſiſtent with the knowledge of every phyſician, that briſk *evacuations* recurred to on the firſt acceſſion of *fever*, will ſometimes be ſubverſive of the *febrile action*; but I am perſuaded it is alſo true, when this period is gone by, that the practitioner cannot maintain any other character than that of an obſerver. Although there are various doctrines of the nature and cure of *fever*, yet, reſpecting its leading features, there is a very general coincidence of opinion; and the more obvious phænomena of *fever* have been ſo ſtrikingly uniform, as to produce deſcriptions very exactly ſimilar. I have already obſerved, that the operation of briſk *evacuants* has been ſometimes found to be ſubverſive of *febrile action*; but if thoſe powers be ineffectually employed, the morbid catenation will continue for an unlimited period, in defiance of every effort of medical interference. During the continuance of *fever*, the phyſician may, in the character of an obſerver, direct what he conceives to be a ſalutary regimen; he may alſo, perhaps, be able to promote ſome of the natural diſcharges, or to correct them, if they be morbidly profuſe; but this, I apprehend, is the extent of his power. For an indefinite number of days or weeks, a chain of morbid action will continue to be exhibited, till a *criſis* or *ſolution* of the *fever* is effected, by means of which we know nothing. This mode of the termination of *fever*, however, is by no means a conſtant appearance; for it very frequently happens, that the morbid action gradually riſes to a certain degree, without any ſtriking exacerbation of ſymptoms, and then begins to decline imperceptibly, till it entirely diſappear. If thoſe phænomena continue to be exhibited, unconnected with, and independent of, medical exertion, it is ſurely incorrect to ſpeak of the *cure of fever*.

About twelve years ago I publiſhed Obſervations upon an Epidemic Fever, in which I employed, what may be denominated, the *Brunonian inſtruments*; and I was much gratified, by having the recovery of caſes, apparently deſperate, aſcribed to my profeſſional ſkill. Youth and inexperience perſuaded me, that I was in poſſeſſion of artillery very certainly deſtructive of *fever*. A few failures, however, ſoon afterwards occurred to confirm my unacquaintance with the nature of *fever*, and the inefficacy of my curative agents. I turned over the pages of authors, but they did not afford me ſatisfactory information on the ſubject: I again had recourſe to my own obſervations; and by comparing what I read with what I ſaw, I became well perſuaded, that *febrile action* was a phænomenon, neither underſtood, nor curable by the means then

employed. I am here to be understood as speaking of *idiopathic fever*, or *fever arising from contagion*. In consulting the various dissertations on *fever*, I found one author extolling one remedy, and another man giving praise to another; I employed all those boasted remedies singly; I varied them, and I combined them; *evacuants*, *refrigerants*, *diaphoretics*, *tonics*, *antiseptics*, *stimulants*, and *anodynes*, had all an impartial trial; and under every mode of treatment, some of my patients perished, and some recovered; nor did the issue appear to be effected by any exertion of mine. The following general conclusions, however, then forced themselves upon my notice; 1st. that the application of powers repressive of arterial action, was manifestly beneficial; and, 2dly. that the application of powers of a contrary tendency, was as manifestly injurious. I do admit, that some of the most distressing symptoms of *fever* may be alleviated, and sometimes completely obviated by the instruments of medicine; yet, I very sincerely believe, that could there be a just estimate of the good and the ill occasioned by medical interference in *fevers*, I have no hesitation in asserting, that the balance will be found to be against our art. My experience has been too ample for me to mistake; and I am well persuaded, that a greater number of patients labouring under *continued fever*, will recover by being treated with *toast and water*, than by an exhibition of the remedies now in use.

We are not yet sufficiently acquainted with the laws which direct the system in a state of health, and we know still less of the circumstances which influence it in a state of disease; but I am convinced, that if the cure of *fever* be practicable, it is to be effected either *by exciting an action subversive of the one present, or by directly arresting the catenation of disease*. I believe it is true, that there are degrees of morbid action, and that a greater action is subversive of an action less powerful. This doctrine is supported by authorities the most respectable: It has been observed, that one morbid action only can operate in the system at the same time; and if two contagions be received, that the lesser remains in a latent state, till the greater either ceases to act, or is nearly exhausted. It has further been observed, that the morbid action of the *plague* banishes from the city or place where it prevails, all inferior epidemic action. It is also true, that at the approach of the *yellow fever* in extreme malignity, all other epidemics instantly disappear: it is consistent too with the observations of every one, that the phænomena of *mania* and *pregnancy* will very constantly impede the progress of *pulmonary consumption*. An additional specification is unnecessary; for, if what I have stated be true,

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it is impoſſible not to pauſe! Theſe facts may afford uſeful information. The evidence reſpecting the curative operation of *calomel* in the *yellow fever*, which prevailed in *Philadelphia*, is too ample to admit of doubt; and I am ſtrongly inclined to believe, that the circumſtance of its exciting a new action, will account for its beneficial effects. It is well known, that *mercury* is deſtructive of the *ſyphilitic virus*, and that as ſoon as the action of the former is apparent, the ſymptoms of the latter begin to diſappear. I know too, that by means of *mercury*, I can hold in check the action of the *variolous contagion*, and by the ſame power render the diſeaſe, even in its worſt form, very certainly mild: it is impoſſible to know thoſe facts, and not to draw inferences. I make little account of the ſuppoſed action of *calomel*, as an *evacuant*; for it is certainly true, that medicines poſſeſſing powers very ſtrongly purgative, have been fruitleſly employed in checking the progreſs of *fever*; nor do I ſubſcribe to any ſuppoſed chemical action of *mercury* on the ſyſtem of fluids; for, if that ſuppoſition be juſt, there are means infinitely more eligible for the accompliſhment of the end propoſed. There are, perhaps, other powers which may be ſucceſsfully employed to fulfil my intention of the cure of *fever*; but I think it probable, that *mercury* will continue to hold the firſt place. For the purpoſe of directly arreſting the catenation of diſeaſe, I recommend the *digitalis:* the power of this plant over the action of the heart, is too well known to need any comment. The *ſymptomatic fever* accompanying *pulmonary conſumption*, is ſo perfectly under the management of the *foxglove*, that the phyſician may keep the patient's pulſe at any given number, and thereby be enabled to adminiſter tonic or other remedies radically curative of the complaint.

I am now employed in making obſervations upon the ſubject of curing *fever* by the means I have recommended, and I hope ſoon to be enabled to lay before you the reſult of my experience. I have been too often diſappointed to feel extremely ſanguine; but if my future trials correſpond with the advantages which I think I have already gained, I am perſuaded that the practice will add ſomething valuable to the treaſury of medicine. I am,

GENTLEMEN,

Your's, moſt reſpectfully,

Bradford, Nov. 24, 1800. G. MOSSMAN.

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To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

I Obſerve that diſcuſſions on the Cow-pox ſtill continue to occupy ſeveral pages in each Number of your Journal. Perhaps no ſubject ever met with ſo ample an examination within ſo ſhort a time; and indeed its importance to the welfare of mankind is commenſurate to the pains beſtowed upon it. The real merits of the diſcovery, however, ſeem to lie within a narrow compaſs, and to reſt chiefly on two points: Firſt, whether it be a ſecurity againſt the Small-pox? and, ſecondly, whether it be a milder diſeaſe? If the teſtimony of medical men in its favour, more general than ever was before publiſhed on any one profeſſional ſubject, can be ſuppoſed to determine the former, it muſt be admitted as proved beyond all controverſy; and, with regard to the latter, the reſult of unambiguous experience is alike convincing. Theſe two points then being as ſatisfactorily proved as any others in medicine, it is unfair to charge the diſcovery itſelf with miſtakes which have occurred in conducting the inoculation.

The ſources of error in inoculating for the Cow-pox, appear to have ariſen from miſtaking the proper time for taking the fluid, and by not noting the characteriſtic progreſs of the diſeaſe on the part inoculated. In my own practice I have obſerved, that the veſicle contained the largeſt quantity of fluid on the tenth day, including that of inoculation, and, on the eleventh, that it had nearly diſappeared, and what little remained had become inert; at leaſt, when taken in that ſtage, it has failed with me in exciting the diſeaſe, in the ſeveral inſtances in which I have tried it. There is ſome variety however in the courſe of the diſeaſe, and the ninth day may, in ſome caſes, be more proper for taking it, as, in others, I have found the eleventh and twelfth to be. About a month ſince I inoculated a boy for the Cow-pox, and till the tenth day I was not certain that he had taken the infection; the changes on the arm were thence very rapid, and no fluid could be diſcerned in the veſicle on the thirteenth. His two brothers, both younger than himſelf, were inoculated from the ſame thread, at the ſame time, and went through the diſeaſe in the uſual way.

Much apprehenſion has been entertained of an extenſive inflammation ſpreading from the inoculated part, and of a conſequent ulceration. In my own practice, the inflammation has ſometimes been conſiderable, but it has not furniſhed me with a ſingle

a ſingle inſtance of a troubleſome degree of ulceration. In ſeveral, where the inflammatory appearances have been threatening, I have thought that they have been aggravated by the tightneſs of the dreſs, and accordingly on ordering a looſe veſt, they have diſappeared in due time. But in the worſt caſes I have yet ſeen, no other application has been neceſſary than the vegeto-mineral water.

An eruption of puſtules was, for ſome time, a pretty conſtant attendant on this inoculation; latterly, however, ſeldom any have appeared on diſtant parts of the body, and not more in number than three or four; the inflammation on the arm, together with a puſtular eruption on that part, and a ſlight febrile attack, have conſtituted all the ſigns of diſeaſe. The true character of the Cow-pox had undoubtedly been changed by an intermixture of the variolous and vaccine virus.

Frequent diſappointment has ariſen from the fluid employed for inoculation having loſt its activity; this may be obviated in future, by inoculating immediately from the ripe veſicle; or, where that cannot be complied with, the chance of miſcarriage may be leſſened by ſaturating a thread, and keeping it in a well-corked vial till the time of uſing; for, when taken upon a lancet it ſoon becomes inert. There is a ſtriking difference in this reſpect, between variolous matter and the vaccine; which I have been accuſtomed to explain by ſuppoſing that, in the Small-pox, the active particles are ſo enveloped in pus, as to prevent their ſudden exhalation or decompoſition; whereas, in the Cow-pox, no ſuppuration takes place, and the fluid being but little more viſcid than water, is ſoon deprived of its peculiar properties by the ſpecific portion flying off, or by undergoing ſome chemical alteration.

Though no inſtance of a violent or unmanageable degree of inflammation or ulceration has occurred to me, the experience of others proves, that both are ſometimes very troubleſome and alarming. As I cannot write upon this point from my own obſervation, I ſhould have ſtopped here; but, reaſoning from analogy, I am led to ſuſpect, that in thoſe caſes where either one or other of the above ſymptoms, particularly the former, has taken place in a violent degree, the future ſecurity of the patient againſt the variolous contagion muſt be rendered ſomewhat doubtful. The inflammation on the part, and ſymptoms of general irritation deſcribed by writers, reſemble thoſe produced by the abſorption of putrid matter from a wound, or what are cauſed by a ſimple inciſion in a bad habit of body, and are eſſentially different from the regular courſe of the diſeaſe. Theſe bear a cloſe analogy to a chancre happening in a bad conſtitution, and followed by inflammation terminating

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in gangrene, or in an ulcer difficult of cure. How violent ſoever theſe ſymptoms may be, the ſyſtem not uncommonly eſcapes contamination by the venereal poiſon; and therefore I hold it ſafe, when the inflammatory appearances on the arm greatly exceed the uſual limits, that the Vaccine Inoculation ſhould be repeated at a convenient diſtance of time, to guard againſt all chance of diſappointment. It is only after the changes upon the inoculated arm have been regular and well defined, that a patient can be ſaid to have ſecurely undergone the diſeaſe.

On the origin of the Cow-pox, conjecture has been buſily employed; but, whether it originate in the horſe or in the cow, or by the united influence of both, does not appear to be of much practical importance. The objections derived from the loathſomeneſs of the origin of it in the horſe, would, by parity of reaſoning, reject the uſe of pork and of duck for food, becauſe ſwine and ducks are foul feeders. It is not the ſource whence it may be derived, ſo much as the uſeful purpoſes to which it may be applied in its mature ſtate that claim our attention. We ſhould be little ſolicitous whether mercury were derived from the animal or vegetable inſtead of the mineral kingdom, whilſt we know that it is an antidote to the venereal poiſon. However, as an object of curioſity, and as opening a new field for phyſiological inquiry, the ſuggeſtion may be ſubmitted again to the teſt of experiment, the only mode of aſcertaining its truth or fallacy. In thoſe experiments which I publiſhed on this ſubject two years ago, every attention of which I am capable was paid to accuracy, and the reſult was decidedly againſt that opinion. Lately, the matter of greaſe has been ſaid to have been employed with ſucceſs; but ſurely where the genuine Cow-pox fluid, of any age, had been ſuffered to come in contact with the ulcerated ſurface, it muſt throw an ambiguity over the whole. An experiment ſo looſely conducted, may deſerve repetition, from the reported contradiction of former facts, and the ſeeming ſingularity of the reſult; but cannot be deemed concluſive againſt the experiments of others, as well as myſelf to the contrary. Nevertheleſs, I am not at all tenacious of my opinion, and ſhall readily relinquiſh it, on ſeeing proper grounds for a conviction of its error.

Beſides the two cardinal points of ſecurity and mildneſs, the Cow-pox poſſeſſes other properties of a very uſeful though ſubordinate nature; it is not contagious; it neither ſtirs up ſcrofula, nor any other diſpoſition to diſeaſe that may lie dormant in the ſyſtem; nor with itſelf is any other introduced; and it may be communicated at all ages, and under all circumſtances

in which a rational practitioner would think of communicating it. By the general introduction of this practice, the comfortable hope of exterminating the Small-pox may be reasonably entertained, and thus millions of lives yet unborn be preserved to their friends and society.

We learn by the accounts from the Mediterranean, that the Cow-pox preserves its characteristic mildness even in a more southern latitude; where, when it appears, the Small-pox is dreadfully destructive. This is particularly the case upon the coast of Africa, and on board our slave-ships; to obviate which in future, I would recommend the introduction of the Cow-pox, and that every slave should be inoculated for it, as soon as taken on board. By this means their lives would be preserved, and their value enhanced by the security, when arrived at the place of their destination. The most beneficial consequences might be expected also from introducing it among the slaves in the West Indies, as the Small-pox is likewise very destructive to them in that climate.

I have put together these few observations, in order to add my testimony in detail, in favour of the new practice, to the mass of evidence already before the public; and to pay my tribute of respect thus publicly to Dr. Jenner for the original suggestion, and to Dr. Pearson and others for the zeal and industry with which they have promoted the practice of this valuable discovery. Should they be deemed of sufficient importance to merit a place in your Journal, they are entirely at your disposal. I am, &c.

W. SIMMONS.

Manchester,
December 9, 1800.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

AT the conclusion of a paper honoured with insertion in your valuable Miscellany (No. XIX.) about three months since, I signified my intention of treating more largely on the benefit which is derived from the exhibition of the Artificial Musk in Hooping Cough, as well as in cases of extreme debility. Leisure now permitting me to make a few observations on the subject I, without further apology, submit them to your notice.

It would be unneceſſary to make a full and tedious explanation of thoſe caſes of hooping cough relieved by the muſk; it will be ſufficient to ſay, that I have adminiſtered it in ſeveral, and with conſtant and uniform good ſucceſs. The urgent ſymptoms are ſpeedily mitigated by this powerful remedy, and the diſeaſe is quickly ſubdued, as it were, by a ſpecific action, unindebted to the aid of any other medicine, I never having preceded its exhibition, even with an emetic: Doubtleſſly, others who have adopted its uſe, muſt with me have had the ſatisfaction of noticing its good effects. I think it neceſſary to obſerve, that I have conſtantly introduced the medicine in form of a tincture, prepared as I have already directed in my laſt paper: This has, I think, the advantage of a more ſpeedy efficacy, as being more diffuſive, and is leſs likely to offend the ſtomach, than when taken in ſubſtance or in an emulſion, for I have obſerved the latter frequently to create nauſea. Conſidering twenty drops of the tincture as a ſtandard doſe for an adult, I proportionate the quantity to be taken according to the age, temperament, &c. of my patient. This is, I think, as much as is neceſſary for me to ſay on this part of the ſubject: I ſhall, therefore, proceed to tranſcribe a caſe, wherein the tonic and reſtorative powers of the muſk are ſo prominent, that I think it deſerves to be recorded.

Eleanor Sadler, aged about 23 years, a pauper of this pariſh, of a light, ſanguine temperament, and a habit prediſpoſed to ſcrophula, had been from her earlieſt infancy the unhappy victim of diſeaſe. When very young, the ſmall-pox deprived her of the ſight of one eye, and greatly endangered the other. She thus continued almoſt in a ſtate of blindneſs, until the age when catamenia uſually begin to appear, at which time the miſery of her condition was much aggravated, as every method taken within her power, for the promotion of the ſecretion, proved ineffectual. She was ſhortly afterwards affected with acute pain throughout the whole epigaſtric region, attended with a dyſpnœa ſo violent, as almoſt to preclude the poſſibility of the leaſt motion or exertion without endangering ſuffocation. By applying to the pariſh ſurgeon for relief, ſhe obtained a temporary one by venæſection; but, although this was frequently repeated, reſpiration ſtill continued ſo laborious, and the pain ſo troubleſome, that ſhe could not in any degree contribute towards providing a ſcanty pittance for her ſubſiſtence. She continued in this deplorable condition for many years, notwithſtanding Mr. Hooper, (the ſurgeon before alluded to) with the greateſt humanity and attention, endeavoured by every mean within his power to *mitigate* her ſufferings, having relinquiſhed the hope of entirely *removing* them. He at length adviſed her

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to go to the Briſtol Infirmary, and procured a recommendation for her. From thence ſhe was ſoon diſmiſſed as incurable. During her ſtay there, ſetons were repeatedly made in her temple, to remove a pain ſhe felt in her remaining eye, the anguiſh of which was almoſt inſupportable, there conſtantly exuding from it an ichorous corroſive diſcharge, except when removed by an artificial drain. Soon after her return to this place, another perſon was nominated to the office of pariſh ſurgeon, who frankly told her, he could do nothing to relieve her, nor would he attempt it. Thus, deſerted by the only aſſiſtance her extreme poverty could claim, ſhe ventured to intreat my attention to her caſe: I complied with her requeſt, and examined her eye, but could diſcover no external inflammation, either in the tunica conjunctiva or elſewhere, nor any appearance of caligo; a thin acrid fluid conſtantly diſtilled in conſiderable quantities from under the palpebræ, but I could not diſcover its ſource. I had recourſe to (as before practiſed) the ſeton in the adjoining temple, and frequently ordered the uſe of collyria with opium, camphor, &c. but the relief theſe afforded were very tranſient. I alſo tried every method I could ſuggeſt to remove the dyſpnœa, which every day became more alarming; I introduced at different times almoſt the whole tribe of demulcents, tonics, alteratives, chalybeates, &c. but all without any permanent advantage. I became at length almoſt weary of the coſt and trouble I continually experienced on her account, without having in proſpect the ſatisfaction of eventually finding my pains requited by her recovery. When, in May laſt, I determined, as a "derniere reſort," to exhibit the artificial muſk, though I had little or no hope of its being attended with ſucceſs. I gave her ſome of the tincture, and directed her to take twenty or thirty drops bis terve de die; but how agreeably was I ſurprized to find, in the courſe of a fortnight, her dyſpnœa had left her; the ſight of her eye was perfectly reſtored, without pain or diſcharge; the ſeton healed up; and, in ſhort, ſhe was enabled to attend to her buſineſs, (a picker of wool) which ſhe has continued to do without interminiſſion to the preſent time, except, that about the latter end of the ſummer ſhe complained of a trifling cough and dyſpnœa, which was moſt probably occaſioned by the ſudden tranſition obſervable at that time, from a warm and dry temperature to a cold and humid one: this was, however, immediately relieved, by having recourſe again to the tincture. It may be worthy of remark, that on the pain and dyſpnœa firſt leaving her, an eryſipelatous inflammation, with a watery eruption, appeared round the whole ſurface of her lower extremities: On this occaſion, I directed her to ſprinkle ſome powdered chalk fre-

quently on the parts, which ſoon ſubdued this unpleaſant occurrence. Soon afterwards the catamenia began for the firſt time to appear, and has continued ever ſince at regular periods, though the diſcharge is inconſiderable in quantity, and of a ſerous appearance, being diveſted of the florid colour it uſually aſſumes. I have thus given you a brief and imperfect account of a caſe, wherein I have enjoyed the felicity of reſcuing a fellow-creature from undeſcribable miſery, ariſing from extreme bodily diſeaſe and the equally ſevere pangs of wretched poverty. Her gratitude on this occaſion is ſuch as might be imagined, from one who is unexpectedly enabled to procure a humble though ſufficient ſubſiſtence, independent of parochial aſſiſtance, and not impelled by want to ſolicit the cold relief of caſual charity.

I ſhall now advert to the advantage derived from its external application to old morbid ill-conditioned ulcers. One caſe only the preſent time will permit me to ſtate.

A young girl, aged 13, of Box pariſh in this county, more than a year ſince, was ſent to me with a large ſcrophulous ulcer in the leg, of two years ſtanding. I employed, for a conſiderable time, every method in my power to heal it; but in vain I attempted to alter its unhealthy appearance, or promote granulation in any degree. I ſteadily purſued for ſome time Mr. Baynton's plan, with ſtrips of adheſive plaſter, and applied tight bandages, but with no effect. I frequently ſcarified the ſurface of the ulcer, hoping, by exciting inflammation, to produce a diſpoſition to granulate. I ſprinkled it alſo with pulv. rhabarb. and many other ſtimulant ſubſtances, which only induced a conſiderable degree of pain, without promoting in the leaſt the benefit intended. Recollecting at laſt that I had frequently heard of the good effects of oxygene applied to inveterate ulcers, and conſidering the muſk to contain a portion from the combination of the nitric acid with the oil of amber, I determined to make trial of it; I therefore daily waſhed the ulcer with the tincture before deſcribed, ſtill continuing the uſe of the adheſive. I was ſoon happy in obſerving effects the moſt deſirable; full and healthy granulations quickly formed; the ulcer aſſuming a florid, healthy appearance, healed gradually in the moſt complete manner, and the new-formed cutis ſeems firm and compact, nor does there appear any probability of a relapſe. I am, &c.

Bradford, Nov. 20, 1800. O. W. BARTLEY, Surgeon.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

TO a great majority of your readers, a deſcription of the Hooping-cough would be totally unneceſſary; I beg, however, through the medium of your uſeful Journal, to offer to their conſideration, what I conceive will be found a very valuable remedy for this diſeaſe.

My attention has been turned towards this ſubject, on account of its having been twice epidemic in this town during the laſt eight years; and becauſe, during theſe times, I have heard it very frequently mentioned as one of the opprobria medicorum.—I have made trial of ſeveral different medicines.

Emetics (the uſual remedy) have never appeared to me to afford more than a very temporary relief.

I have given the calx of zinc in large and frequent doſes, ſo as to excite continual nauſea, with no beneficial effects, excepting towards the latter end of one ſolitary inſtance, when the diſeaſe appeared to have become purely ſpaſmodic. In this caſe it performed a complete cure.

The flores cardam. pratens. in fine powder, appeared to have ſome effect in the ſame way; but on account of the great quantity that muſt be exhibited for this purpoſe, they are generally inadmiſſible.

In a few inſtances I have cautiouſly uſed volatile alk. and opium; but as this medicine never failed to aggravate the morbid diſpoſition of the cheſt, it was quickly laid aſide.

Bliſtering the ſternum has often relieved dyſpnœa when preſent, but never ſeemed to have much effect upon the cough.

Having the misfortune to loſe the firſt little patient who came under my care for this diſeaſe laſt Auguſt, under the common mode of treatment, and having witneſſed the good effects of the Digitalis in ſeveral affections of the cheſt, I was induced to make trial of it.

The ſaturated tincture, mixed with an equal quantity of ſyrup, is pleaſant to the taſte, and I have hitherto experienced little or no difficulty on this account; a circumſtance of ſome importance where children are concerned.

Three or four caſes remain yet undecided. Of ſeventeen others, whoſe names are now before me, thirteen have been completely cured by this medicine alone. In four others it was totally uſeleſs; two of theſe had meſenteric diſeaſe, another was teething, and the fourth, a boy aged three years, enjoying apparent health in other reſpects, never was brought under the influence of the medicine, though given to the extent of 40 drops three times a day; it was increaſed no further,

ther, his mother growing weary of the trouble of uſeleſs exhibition. So that in three of theſe caſes the failure can hardly be aſcribed to the inefficacy of the remedy, as they died when it had been given a very ſhort time.

The action of the medicine has not appeared to be ſo ſpeedy, in children of delicate and irritable habits, as in the more vigorous and robuſt.

It has never been exhibited ſo as to produce perceptible ſickneſs or vertigo. Beginning with a ſmall doſe, it has been gradually increaſed ſo as to lower and leſſen the frequency of the pulſe, and continued in this manner until the cough entirely ceaſed.

The age of the children on whom theſe trials were made, was from eight months to four years.

In plethoric habits I have preſcribed bleeding with one or two leeches, and have begun the uſe of the tincture immediately afterwards.

Avoiding expoſure to cold, particularly keeping the extremities warm, has been ſedulouſly recommended, and has, perhaps, been a great means of preventing a recurrence of the diſeaſe, a circumſtance very common, more eſpecially at this ſeaſon of the year; when, however, from imprudent expoſure, it has recurred (as happened in one inſtance) a repetition of the tincture has been attended with the beſt effects.

If the above hints ſhould induce practitioners to give this remedy a fair trial, and if it ſhould prove ſo beneficial in this hitherto almoſt unconquerable complaint, as theſe inſtances ſeem to indicate, I ſhall be highly gratified.

Whilſt upon this ſubject, it may not be amiſs to deſcribe what appeared to me a ſingular termination of this diſeaſe.

In the winter of the year 1796, I attended a child, aged five months, for the ſpace of ſeveral weeks, and, notwithſtanding the uſe of every remedy which afforded a probability of ſucceſs, it continued to become gradually worſe, until its life was deſpaired of. I ſaw it one evening, and had no expectation of ſeeing it alive the next day. The following morning, however, I was agreeably ſurpriſed to find it much better; a plentiful eruption of meaſles* had taken place during the night, the cough and breathing were greatly relieved, and the child had ſucked very heartily. The meaſles diſappeared at the uſual time, the cuticle diſquamated, and, from this period, every morbid ſymptom vaniſhed. I remain, &c.

Hull, Dec. 26, 1800. GEO. FIELDING, Surgeon.

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* The meaſles were exceedingly prevalent at that time all over the neighbourhood.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

THE impartiality with which your Journal is conducted, leaves me no room to doubt of your favouring me with an early inſertion of the following Remarks, in reply to Mr. Groſe, on the ſubject of "Yeaſt in Typhus."

Mr. Groſe is much to be commended for inveſtigating the ſubject by ſuch experiments as would enable him to draw any uſeful and ſatisfactory inferences from them; but I think all he has done and ſaid would have met the public eye with equal propriety, if he had not indirectly charged me with being a "Perſecutor," * and inſinuated a ſuſpicion of my candour and veracity, by obſerving, that all who have written in your Journal, on the ſubject of yeaſt in typhus, "with the exception of *one* gentleman, have *impartially confeſſed* the beneficial effects." A conduct like this is unworthy a man, who profeſſes to be ſearching after truth, and is equally indifferent whether it be ultimately found by himſelf or his neighbour, provided he do but get into poſſeſſion of it. The paſſage in my former letter, which ſeems to have given offence to Mr. Groſe, is that wherein I mention the purgative effects produced by the yeaſt in the caſes which I related.† Authors ſeldom have juſtice done them, when ſelect paſſages alone are conſidered by their Readers; it is only by a comprehenſive view of the *whole* that the true ſenſe of any publication is to be obtained. I remember when a literary character *was tried a few years ago by one of our Univerſities, for publiſhing an offenſive book*, he complained that the Proſecutor, by ſelecting paſſages, deſtroyed the ſenſe of it, and made him ſpeak things he never intended. "In this way," ſaid he, "I can prove that the Scriptures command you to commit ſuicide; for in one part of the Bible it is ſaid, 'Ahitophel went and hanged himſelf;' and in another, 'Go thou, and do likewiſe." Thus has Mr. Groſe certainly miſconceived the purport of my former letter, by fixing his eye too long upon a particular paſſage; whether owing to the obſcurity of my ſtyle, or his own inattention, is not for me to determine. But I flatter myſelf, if Mr. Groſe will oblige me ſo far as to give my letter another peruſal, he will plainly diſcover that my chief deſign is to obviate the *danger of empiricism* in general, and not to *perſecute*, with unrelenting malignity, the judicious exhibition

* See Mr. Groſe's Letter in No. XXII.

† See Poſtſcript to Mr. Groſe's Letter in No. XXI.

exhibition of yeaſt; for I even allowed, "that the fixed air in balm may occaſionally have ſome good effect in putrid diſeaſes." My objections were, and ſtill are, againſt the *indiscriminate* uſe of yeaſt *alone* in putrid fevers, and holding it out amongſt the vulgar, in the moſt unqualified manner, as an infallible ſpecific; as was done in the Armenian and Monthly Magazine, referred to in my letter. Is it poſſible that Mr. Groſe himſelf can believe that a perſon "in the laſt ſtage of putrid fever," was ſeen the next morning after taking ſome yeaſt, "walking in his garden," apparently well? I do not doubt the veracity of the author of this aſſertion, but I call his judgment in queſtion. If ſuch were the effects of the yeaſt, I cannot believe that the patient was in the laſt ſtage of putrid fever, eſpecially when it is conſidered, that he was "an old man upwards of 70."*

Now, as the Armenian or Methodiſts Magazine is very extenſively circulated amongſt the lower orders in all parts of the kingdom, ſurely there is a propriety in condemning the *unqualified* encomiums of any medicine as a remedy for putrid fevers. It is obſervable, however, that even in *these strong cases related by the* Rev. Mr. Cartwright, *bark* was conjoined with the uſe of yeaſt, and therefore the concluſion that the latter was a ſpecific, is not juſt; the cure may as well be attributed to the bark. So likewiſe in the ſolitary caſe with which Mr. Groſe has favoured the public in No. xxi. the patient "was ſponged all over with cold vinegar, and directed the free uſe of yeaſt and — *wine*." So far then as we may judge from what Mr. Groſe has told us, even he has not truſted to his favourite remedy. I doubt not, many of your readers will attribute the ſucceſs of this caſe as much to the vinegar and wine as to the yeaſt. The ſtatement of the caſe, as given by Mr. G. appears to me very vague and unſatisfactory. He tells us, that the boy was attacked on the "10th of July, with the uſual ſymptoms of typhus." On the third day, that is, on the 12th, the ſponging and uſe of yeaſt appear to have been begun. From the 13th "he became evidently better." "In two days after the yeaſt was diſcontinued." — "On the conſideration of the wonderful change which ſo rapidly ſucceeded the adminiſtration of the yeaſt," ſays Mr. G. "I cannot but imagine it to be the beſt remedy in putrid fevers ever yet diſcovered." Are we to conclude from this relation, that Mr. G's patient was cured of a putrid fever within five days from its firſt attack? If I can underſtand Mr. G. right, this is the concluſion he wiſhes to be drawn.

* See the Armenian Magazine for Auguſt 1799.

drawn. A pretty extenſive practice amongſt perſons generally afflicted with this diſorder, has never afforded me an opportunity of ſeeing a typhus fever terminate in this ſhort ſpace of time. I have ſeldom ſeen petechiæ appear earlier than the 5th, 6th, or 7th day. The criſis does not often take place earlier than the 14th or 17th day; and in the caſes which prove fatal, I have generally obſerved the fever to run on till the 21ſt day. Not that any general rule is invariably obſerved; but I have never ſeen a true typhus, with ſymptoms of putridity, finiſh its courſe in *five* days.

Mr. G. wiſhes to explain the action of the yeaſt on the living ſyſtem, from the known properties of fixed air in ſweetening putrid meat; and aſks, whether ptyaliſm is not excited as well by the external application of mercury, as by the internal uſe of it? Doubtleſs, it is; but in both caſes the effect is produced by the mercury being received into the circulating ſyſtem; and therefore the application of mercury to the ſkin, for the purpoſe of abſorption, is not analogous to the chemical combination of fixed air with putrid meat; conſequently, his reaſoning is inconcluſive.

Having now endeavoured to juſtify the ſentiments I have before obtruded on the public, I take my leave of the ſubject, having no deſign of making your Journal (which will, I am ſure, be employed in a more profitable manner) the vehicle of controverſy. I am, &c.

Kidderminſter, Dec. 6, 1800. GEO. CUSTANCE.

A contagious fever, of the moſt malignant kind, appeared in London and Weſtminſter, during the months of November and December laſt. A delirium often commenced as ſoon as the third day; and a petechial eruption, though more florid than uſual, appeared on the breaſt and trunk. The other ſymptoms differed little from thoſe uſually obſerved in jail or contagious fevers.—A female patient, afflicted with this formidable diſeaſe, and with permanent delirium, was admitted into the Weſtminſter Hoſpital during the laſt month, and, as uſual, put on the generous and cordial plan; but in a few days neither food nor medicine could be adminiſtered, on account of the repugnance of the patient. In this deſperate ſituation I directed the apothecary to procure ſome freſh yeaſt, and to dilute it if neceſſary, of which a table ſpoonful was to be given every four hours. The patient took it without difficulty; it agreed with the ſtomach and bowels, and in three days an evident amendment was obſerved. The patient is now perfectly cured of the fever, and no other remedy, not even wine, was employed in conjunction with the yeaſt. T. B.

Mr. Franks, on Variolous Contagion.

[Continued from pp. 81—86 of our laſt.]

To theſe teſtimonies, the number of which might have been greatly augmented, Dr. Watkinſon obſerves, I ſhall beg leave to ſubjoin my own.— " I have paid particular attention to the point in queſtion, ſince the eſtabliſhment of the Diſpenſary for general Inoculation; and can with truth affirm, that a ſingle inſtance has not yet occurred in that charity, in which the contagion has been ſpread by an inoculated patient. Where the chance of ſpreading it has been apparently great, I have been very ſtrict in my inquiries. In many caſes the circumſtances have been ſuch, that if the apprehenſions of a celebrated Inoculator were well founded, the diſtemper muſt inevitably have been communicated.

" Some have been inoculated in narrow ſtreets, in the midſt of thoſe who were obnoxious to the Small-pox, and others in little courts, where, according to the common opinion, the danger of communicating the diſeaſe was ſtill greater.

" In the latter caſe, the patient has ſometimes been kept in a little room on the ground floor, the door of which opened directly into the court, and in the day time was ſeldom ſhut. Before this door, and within a few yards of the perſon inoculated, a number of children have continued to play during the whole courſe of the diſorder, and, as has been already affirmed, without receiving the infection.

" Baron Dimſdale indeed aſſerts, that inſtances of a contrary kind have frequently fallen within his obſervation. But, as the Baron does not ſeem to have been aware of the great influence of the epidemic conſtitution of the air—it is poſſible that what he ſhould have attributed to this cauſe, he has ſometimes imputed to ſimple contagion. Be that as it may, a writer in the *Monthly Ledger*, under the ſignature of J. S. who had an opportunity of ſeeing the practice of inoculation in the country where theſe inſtances happened, ſpeaks of the conſequences of it in a language very different from that which is held by the Baron.

" Dr. Tiſſott, in a piece intitled, *L'Inoculation juſtifiée*, very juſtly obſerves, that the Small-pox is indeed a contagious diſeaſe; but, that it does not propagate itſelf ſo much by contagion as by an *infection of the air*, produced by cauſes which are unknown to us.

" The truth of this obſervation is exemplified in a very ſtriking manner, by a fact which is related by Dr. James Sims in his *Obſervations on Epidemic Diſorders*.

" About

" About the autumnal equinox," ſays he, " bilious diſorders declined, giving way to the Small-pox, that with unheard of havock deſolated the cloſe of this year, and the ſucceeding ſpring of 1767. They had appeared above a year before, along the eaſtern coaſt of the kingdom, and proceeded ſlowly weſtward with ſo even a pace, that a curious perſon might with eaſe have computed the rate of their progreſs. In this they were ſcarcely to be interrupted, as appeared by the following inſtance. The children of ſoldiers on their march, had brought them from other places to ſome towns here, during the preceding ſummer; and although they were of a malignant kind, the afflicted all dying, and therefore moſt fit to propagate the infection, yet *not one of the inhabitants received them, until, in their regular progreſs, they had travelled over the intermediate ſpace.*

" It appears from the *Premier Rapport ſur l'Inoculation* of Dr. Petit, that the Hotel Dieu, a large hoſpital in the centre of Paris, is never free from the Small-pox, and that at certain times the ward deſtined to receive thoſe who are ſeized with that diſeaſe is extremely full; that notwithſtanding the multitude thus crowded together, and the enormous quantity of infection produced, and that in a place too which is open to the public, and where there is continually an immenſe concourſe of all ſorts of people, the diſeaſe is not obſerved to be always preſent in the neighbourhood of this hoſpital, nor even to be more common there than in other parts of the city.

" A remarkable inſtance of the inſufficiency of contagion alone to the production of this diſtemper is authenticated by Dr. Sandifort, the preſent Profeſſor of Anatomy and Surgery in the Univerſity of Leyden.

" One of the children in the Orphan-houſe at the Hague was ſeized with the Small-pox; and though the communication between the patient and the reſt of the orphans was not interrupted, none of them caught the diſeaſe.

" Another inſtance of the ſame kind, and not leſs remarkable, I remember to have heard related by the celebrated Profeſſor Van Doeveren of Leyden, in his lectures on the practice of medicine.

In the ſpring of the year 1762, a company of foot, with twelve children labouring under the Small-pox, entered the city of Groningen, which was then entirely free from that diſeaſe. Theſe children were diſperſed in the houſes of the poorer ſort of inhabitants, in the midſt of numbers who had not had the diſtemper, and who, conſtrained by their poverty, cou'd not fly from its approach.—A fairer trial of the power of ſimple contagion could ſcarcely have been deviſed. The event

was ſuch as convinced the learned Profeſſor that this power was inadequate to the effects which had been commonly aſcribed to it.—The epidemic threatened was not produced, nor, which is more extraordinary, was the diſorder propagated ſporadically; for, after the moſt ſedulous inquiry, not an individual could be found to whom the infection had been communicated.

" To multiply facts of this ſort, Dr. Watkinſon obſerves, would be eaſy, but I truſt that theſe will be quite ſufficient to eſtabliſh the poſition for which they were brought. The Doctor therefore quits this ground, and meets the Anti-Inoculiſts upon that in which they have hitherto thought themſelves ſecure of victory, namely the Bills of Mortality. And in this reſpect the Doctor appears to be no leſs happy, for he has ſhewn, that although the prevalence of inoculation and the increaſed mortality of the Small-pox, may at ſome particular periods have coincided, (for according to the laws of chance, this muſt ſometimes have happened) yet, from the great irregularity of their coincidence, it may be fairly inferred, that *they are not connected together as cauſe and effect.* And upon this fact, the Dr. obſerves, " the defence of inoculation againſt the charge of increaſing the mortality of the Small-pox, might perhaps be ſafely reſted; but I ſhall add to it another, derived likewiſe from the Bills of Mortality, which appears to be concluſive. For the fact alluded to, I am indebted to my ingenious friend Dr. James Sims.

" An objection has been made to inoculation, and lately ſupported with conſiderable warmth by ſeveral very reſpectable writers, which, if founded in truth, would be ſufficient to prove that the practice of this art is detrimental to ſociety. It is aſſerted, that, by inoculation the contagion is ſo much propagated, that the victims to the Small-pox have been more numerous ſince than they were before that practice obtained; and that the mortality has increaſed in proportion to the reception of the art.

" To prove theſe aſſertions, it has been uſual to extract the deaths by the Small-pox from the Bills of Mortality, for a certain number of years previous to the introduction of inoculation; and to compare the general average of theſe with the average of deaths ſince that time; and by dividing the latter into ſeparate periods of years, to ſhew, that the proportion of deaths by the Small-pox has been conſtantly increaſing ſince the practice of inoculation began.

" Thus, one writer, who gives a view of the Bills of Mortality for eighty-four years, ſhews, that in forty-two years previous to inoculation, only ſeventy-two deaths in every thouſand were owing to the Small-pox; whereas, in forty-two years afterwards,

afterwards, the deaths by that diſeaſe amounted to eighty-nine in every thouſand; and that, by dividing the latter of theſe into leſſer periods, the average of deaths is as follows:—In the firſt twelve years it is ſeventy-four in a thouſand; in the next ten, eighty-three; in the next, ninety-ſix; and in the laſt ten, one hundred and nine.

"This conſtant increaſe is attributed to inoculation; and the argument appears to be properly ſtated, as it guards againſt any deception which might ariſe from the variations in the general number of deaths: I have endeavoured to ſtate this objection in the ſtrongeſt manner, and hope that I ſhall be able to give a deciſive anſwer to it.

"The reaſon why the above objection has not hitherto been ſatisfactorily anſwered, is this; theſe who have attempted it, have taken the Bills of Mortality as garbled and unfairly ſtated by the objectors to inoculation, without giving themſelves the trouble of further examination.

"The circumſtance in which the objectors have dealt unfairly by us is, that in taking the medium of deaths for a certain number of years prior to the practice of inoculation, as a fixed ſtandard, they have not once hinted that the mortality of the Small-pox had increaſed in the ſame proportion before, as it has done ſince the introduction of that art; and by prudently publiſhing only a part of the Bills, they have given us no opportunity of making this diſcovery. Had they given the whole of the Bills, is it to be ſuppoſed that any man in his ſenſes would have joined with them in blaming inoculation for an increaſe, *which commenced ninety years before inoculation was heard of in this country, and continued progreſſive through the whole of that period?*" Dr. Sims has conſtructed eight tables; theſe tables will ſhew that the mortality from caſual Small-pox, inſtead of increaſing, is at preſent (*id. eſt.* more than twenty years ago) conſiderably declining.

Thus have I extracted from Dr. Watkinſon's work, a body of evidence in ſupport of the opinion which I ſubmitted to the readers of the Medical and Phyſical Journal in a former number, namely, that the ſuperiority of the Vaccine over the Variolous Inoculation is ſomewhat over rated; by ſhewing that the accuſation which has been brought againſt inoculated Small-pox, of propagating contagion, and increaſing the mortality of caſual Small-pox, is void of foundation.

Had it not been for this unfortunate objection, the inſtitution for inoculating the poor of London, at their own habitations, would have continued to exert its benign influence, and ere this have reſcued thouſands, who may have fell victims to the malignity of Small-pox; but it was repreſented as fraught with

with very dangerous consequences to the community, and as tending, by spreading the contagion, to increase the very evil it was designed to lessen.

Until a sufficient number of similar institutions are established in London, to inoculate the whole of the poor with vaccine or variolous matter, as each individual may prefer, let the Ministers in every parish be enjoined, by proclamation if expedient, to take opportunities occasionally to recommend the inoculations for universal adoption, by pointing out to their audiences the incalculable benefits which would arise from such a procedure. Let these recommendations from the pulpit be seconded by the governors of the poor;—let it not become a parish job;—let not the poor's rate be increased on this account;—let not the concern be entrusted to one or two individuals in a parish; but let every medical person resident in the parish be invited to lend his assistance towards inoculating the whole of the poor at their own habitations, for Small-pox or Cow-pox.

In a matter of such importance, none, as good men and good subjects, would refuse; on the contrary, a degree of emulation would be excited, highly beneficial; all would be anxious to participate in so glorious a work: Thus would the cause of humanity be served, and the best interests of the country promoted, by adding to the population of it. An estimate may be formed of the immense number of lives which would be yearly saved, were the *variolous inoculation only employed*; when we recollect that Baron Dimsdale, whose practice must have been very extensive, has informed us, *that he did not lose a single patient in the course of twenty years from inoculation.*

At the end of every year, each individual should be requested by the vestries to deliver in an account of the number inoculated, with names and places of abode, within the year, and for which they have received no sort of remuneration: These accounts should be published for the information of the parishioners, and a subscription might then be proposed by the vestries, which would enable them to tender to their professional brethren, something more than the thanks of the parish for their laudable undertakings.

If something like this plan should be adopted, instead of between two and three thousand who die annually in London of Small-pox, the mortality of this disease would be reduced to a cypher. I am, &c.

Smith Street, Westminster,
Dec. 10, 1800.

JOHN FRANKS.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

THE efficacy of Inoculation of the Matter of Cow-pox, in rendering the human body unſuſceptible of Small-pox, *appears* now to be fully and completely eſtabliſhed; at leaſt, *as far as we can conclude from the experiments* hitherto made, and the time that has elapſed ſince their inſtitution.

Every generous mind will congratulate himſelf on a diſcovery that promiſes ſo much benefit to mankind, and will experience the higheſt pleaſure from the ſucceſsful labours of thoſe who have ſo ardently exerted themſelves in the cauſe of humanity and ſcience.

I feel myſelf deeply intereſted in the ſucceſs of this Inoculation; and it is with reluctance I here take the liberty of ſubmitting a Caſe, that ſeems to militate againſt the permanent preventive influence of the Variolæ Vaccinæ.

This is the grand deſideratum, the determination of which can be effected only by length of time. Three weeks ſince, I was requeſted to viſit Mrs. Dredge, aged 55 years, living in the neighbourhood of Caſtle-Cary, whom I found labouring under Small-pox of the diſtinct ſort, which ſhe caught from a ſervant-boy living in her houſe. She informed me, that ſhe did not expect this diſeaſe, ſince ſhe had taken, twenty-eight years before, the Cow-pox from milking cows affected with the ſame. She obſerved her diſeaſe was very ſevere, having had numerous puſtules on the hands and fingers; loſt two nails; had a conſiderable tumour in the axilla, and great pyrexia. Sixteen years ago, ſhe was much expoſed to Small-pox in her own family, having children ill of it, both naturally and from inoculation, and whom ſhe conſtantly attended, but eſcaped infection. She ſays, that ſhe has not been ſubſequently expoſed to it till the time abovementioned. Her ſiſter was affected with Cow-pox at the ſame time, and from the ſame cows; had a large tumour in the axilla, ſeveral puſtules, and much pyrexia. Twenty years afterwards this woman attended her own children in the natural Small-pox, (one of whom died) but without receiving any infection. The diſeaſe among the cows extended through the whole dairy, conſiſting of about twenty cows; and the milk was ſo much affected, as to be rendered unfit for uſe for ſome time.

The above Hiſtory may be conſidered as an addition and illuſtration of the two Caſes communicated by Dr. Sims, in the firſt and ſecond volumes of the Medical and Phyſical Journal.

Journal. It will probably be ſaid, that, from the large and deciſive experience of the infallibility of the Cow-pox virus in preventing Small-pox, little credit or confidence can or ought to be given to the few and almoſt ſolitary oppoſing inſtances now adduced, and eſpecially as ſome dubiety remains of the genuine nature of the diſeaſe. I admit the propriety and force of this reaſoning, but cannot at the ſame time, withhold this information from the public eye. I am, &c.

JAMES WOODFORDE, M.D.

Caſtle-Cary, Dec. 5, 1800.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

CONVINCED that no preliminary Diſſertation is neceſſary to invite your attention, or that of the whole medical world, to any circumſtance which will tend to promote the very general and humane attempts to introduce the Cow-pox: I ſhall preſume to make an obſervation or two, which I venture to believe will tend in ſome degree to promote the grand, benevolent deſign. In the practice of medicine, generally conſidered, it is impoſſible that practitioners can ever devote too much attention to all the minor parts of the ſubject which calls for their conſideration; a want of this care has too frequently defeated the beſt laid plans, and the almoſt apparent certainty of ſucceſs: This obſervation applies more particularly to the attempts at introducing a new diſeaſe; every little circumſtance attached to it is of the higheſt importance, and every endeavour muſt be uſed to combat general as well as local prejudices, to render its good effects as manifeſt as poſſible. The common practice of conveying the variolous matter from one town or village to another, when Inoculation for the Small-pox became pretty general, was by means of threads imbued with the matter, encloſed in paper; a pretty free inciſion was made in each arm to receive the thread, in order that infection might be certain: But when it was found that Small-pox matter was of a very virulent nature, and that portions of it, when detached in this way from the body of a ſufferer, retained their poiſonous nature for a conſiderable time, Operators contented themſelves with barely moiſtening the point of a lancet or needle with it, for uſe on ſome diſtant day; a method which but rarely failed, where every other circumſtance was favorable

for

for the reception of the diſeaſe, and attention was paid to the exact point of time when the matter was fitteſt for being uſed. Not ſo the Cow-pox matter, I apprehend; I am convinced more attention is neceſſary on this head, than has yet been given to the ſubject. The difference in degree of malignity, or ſtrength of the two fluids, ſeems now ſufficiently obvious, and it will be inſtantly allowed, that we cannot too forcibly impreſs this truth on the minds of all who will give us a candid hearing. When this point is obtained, and any friend deſires to ſubmit their child to the operation, it is one of the firſt wiſhes of both parties, that the diſeaſe may ſucceed after the firſt time of inſerting the matter: When this deſirable event fails to take place, the diſappointment is great; and if it occurs often, will tend much to retard the progreſs of the highly important buſineſs.

The firſt child I was deſired to inoculate with Vaccine matter, reſided in the ſame houſe with an intelligent Phyſician of this city, who took great pains to procure proper recent matter; it was taken on a lancet in the uſual way, and the day following I uſed it, making a very free ſcratch in each arm, ſo as to draw blood; which mixing with the gummy matter of the pox, formed a kind of ſcab on each little ſore: This remained on ſome days, but produced no infection. At the end of ſixteen or eighteen days, a freſh ſupply of matter being obtained, I made the inciſions larger, carefully moiſtened the dried fluid with ſteam, &c.; but to as little purpoſe as before. Notwithſtanding theſe diſappointments, and the ſubject being a delicate child under ſix weeks old, the mother cheerfully requeſting a third trial, my patient was carried to a houſe where two children were under the diſeaſe, and inoculated with limpid matter warm from the arm of one of them; this ſucceeded, and the diſeaſe run its ordinary ſafe courſe: In the interim I received matter from London and Glouceſterſhire, on thread, incloſed in paper, neither of which, though uſed with every care, produced any effect. As before remarked, conſiderable chagrin follows the failure of infection from the firſt operation, even in Small-pox; ſome parents I have known, who would have deemed it preſumptuous to permit even a ſecond trial. The part of the country I live in, although, perhaps, the firſt milk county in the kingdom, affords little or no opportunities of collecting the original Cow-pox virus; we have, therefore, hitherto had to procure it from a diſtance. To prevent others experiencing the mortification of want of ſucceſs the firſt time of operating, is my intention in propoſing the method of taking and preſerving the variolous virus, taught me by my firſt preceptor, the honoured and ingenious Mr. James Wyke

ſurgeon, of Colebrook-dale, to be adopted for the more effectual preſervation of the vaccine.

Procure a ſmall phial, the ſmaller the better; fit it with a tight cork, having previouſly expelled the damp air from it by placing it near the fire a ſhort time; take a thread of cotton yarn, about an inch, or inch and a half long, make a puncture in the veſicle, preſs the centre, or middle part of the cotton when held like a loop, thereon, at the ſame time untwiſting it a little, thus imbibing all the moiſture you can from the part; twiſt the ends together, and place in your bottle, ſo as not to touch its bottom, the cork of which will keep it tightly againſt the neck; put it into a warm pocket, and carry it about with you until wanted; when required to be ſent to a diſtance, though a bottle be not a convenient article to tranſmit by letter, yet we have now the comfort of ſuch a number of other conveyances, that this obſtacle ſinks into nothing, when compared with the ſatisfaction ariſing from ſucceſs. When about to be uſed, if the phial be immerſed in hot water a ſhort time before uncorking, the matter will rarely be found dry and brittle, as it almoſt always is on a lancet; and if it ſhould be ſo in a ſmall degree, ſtill it will contain the active principle unevaporated, whilſt that on the inſtrument is too often wholly inert. Since writing the above, I perceive by a York Newſpaper, Dr. Cappe mentions the advantage reſulting from keeping the vaccine matter on glaſs, and that from this ſubſtance it can ſuffer no injurious change. Though this be an undoubted fact, as to the matter of glaſs itſelf, yet, I apprehend it will not ſecure the fluid from the influence of the air, which I imagine will be allowed to be the efficient cauſe of injuring its activity in any other way than incloſure in a phial. I need not dwell a moment on the property cotton ſeems to have of imbibing and retaining contagious miaſma. Mr. Simpſon of Malton, Yorkſhire, recommends a ſlip of glaſs with the matter *dried* on it, to be run through a cork, and then incloſed in a ſuitable bottle; this mode comes neareſt the one propoſed, but I imagine the cotton will be found preferable, on account of its *not* ſuffering the matter to dry ſo ſpeedily as glaſs. Having written thus far, your laſt Journal came to hand; I find therein a letter from Dr. Marſhall, at Gibraltar, to Mr. Ring, near the concluſion of which, he ſays, "Some of the matter we uſed for inoculation here, was what you obligingly furniſhed us with, and we find it perfectly efficacious, although no precautions had been uſed as to the preſerving it, more than putting it in a *ſmall phial*.

Again, Dr. Waterhouſe, of Cambridge, New England, writes thanks to his friend in Bath for the *phial* of vaccine matter,

matter, and says, "its activity I have experienced on my nearest connections:" I have no doubt the learned Professor was well pleased at his success, but I have every reason to believe, had he received an infected lancet, or bit of thread in paper, he would, on the other hand, have been much disappointed. Before concluding my letter, permit me to add an observation on the means of inducing the poorer classes of the community to avail themselves of this invaluable gift of Providence, for, unless we can cause *them* to listen to our plan, unless we can fully arrest *their* attention, our progress, I fear, will be but slow; on the contrary, this desirable object once attained, the business will be complete. All the medical gentlemen of this city have zealously come forward with a tender of their services to inoculate the poor, gratis, whenever applied to for that purpose; this is a great step, but something more must be done; their understandings must be convinced of the safe, salutary, and certain consequences of the operation, before they will apply to us to serve them. Would not the printing, on a suitable paper, a few of the clearest, most striking facts, in the plainest language, and freely circulating them amongst individuals of this description, joined with the powerful force of example in the higher orders, have this effect? I am, &c.

Chester, Nov. 17, 1800. G. N. HILL.

To Dr. BATTY.

Dear Sir,

THE active and unremitting exertions of the Editors of the Medical Journal to diffuse a general knowledge of the great advantages which result from the Jennerian Inoculation will, I have no doubt, ensure insertion in your next Number to the enclosed additional Testimonial, signed by nearly all the physicians and surgeons in these large towns. You will be much gratified to hear, that the ingenious physician of the fleet, Dr. Trotter, (than whom, I believe, there is hardly a man more alive to the extension of medical improvements) and the navy surgeons, are procuring an elegant and very appropriate GOLD MEDAL, to be presented to Dr. Jenner; an honourable and generous resolution, expressive at once of their great humanity, of their zeal for the service, and of their respect for, and attachment to science! Indeed it is very true, and I feel great pleasure in making the remark, that on this great occasion, as well

as in the profecution of many other late intereſting inquiries, thoſe gentlemen have evinced an ardour of purſuit, which certainly reflects on them great reputation, and will, it may be hoped, bye and bye, (when it ſhall be recollected how expenſive their claſſical education, in the greater number of inſtances muſt neceſſarily be, how much further expence, and how many years of indiſpenſable and ſolicitous application, the nature of their ſubſequent ſtudies always requires) ſecure to this truly reſpectable and important claſs of officers, a larger ſhare of public remuneration. I am, &c.

Plymouth Dock, Jan. 10, 1801. R. DUNNING.

For the MEDICAL and PHYSICAL JOURNAL.

THE introduction of the Vaccine Inoculation in the populous towns of Plymouth and Plymouth Dock, at a very early period after the commencement of the practice in this country, and the continuance of it on an extenſive ſcale to the preſent time, have afforded ſufficient opportunities to a numerous body of practitioners to confirm by their own obſervations, and by the teſtimony of their immediate friends, the ample and reſpectable evidence which has been adduced in favour of this eminently uſeful diſcovery. The general ſucceſs of the new Inolation has not, however, prevented the circulation of reports of unfavourable accidents, and of occurrences inconſiſtent with its character of abſolute ſafety in itſelf, and of affording permanent ſecurity againſt the future invaſion of Small-pox. As the prevalence of ſuch reports muſt have a tendency to excite doubts of the ſafety and efficacy of the new Inoculation in the minds of thoſe who have not the opportunity of tracing them to their origin, and who are not acquainted with the ſtrength and ſolidity of the maſs of evidence on which the ſupporters of the new practice ground their conviction of its utility, we have thought, that it might not be unattended with advantage to the public, at leaſt to that ſmall part of it to which our names and characters are known, to add to the numerous atteſtations already given, a Declaration, as well of our conviction of the efficacy and ſecurity of the practice of inoculating the Cow-pox in general, as of our full perſuaſion, reſulting from an inquiry into the circumſtances of the caſes adduced, that no inſtance has occurred in this neighbourhood, which is entitled in any degree to call in queſtion the reaſonableneſs of this conviction, the reports which have ariſen being evidently founded in error and miſrepreſentation. The effects of miſrepreſentation can be obviated only as they ariſe; but it may not be amiſs to obſerve here more particularly, that the Small-pox has lately prevailed

prevailed in this neighbourhood to a conſiderable degree, and that, in all the inſtances in which this diſeaſe is ſaid to have occurred after inoculation for the Cow-pox, the infection of the former was evidently received before the inoculation for the latter, or the operation had failed of producing thoſe ſymptoms of conſtitutional affection, on which alone ſecurity depends. The ſources of error will, we truſt, be in future avoided, by due attention to thoſe cautions in the practice, which have been ſo fully pointed out by Dr. Jenner and others.

Plymouth and Plymouth Dock, Jan. 7, 1801.

R. B. Remmett, M. D.
William Woollcombe, M. D.
T. Trotter, M. D.
R. Sheppard, M. D.
James Gaſking, M. D.
Robert Forteſcue,
James Courtenay,
George Cooban,
Richard Dunning,
D. Little,
Vaughan May,
Robert Sargent,
Andrew H. Sargent,
Thomas Stewart,
John Smith,
D. W. Spry,
J. Lower,
John Penkivil,
J. Rivers Lancaſter,
Samuel Fuge,
Thomas Thynne Folds,
Stephen Hammick,
Stephen Hammick, jun.
Nathaniel Seecombe,
Thomas Richardſon,
Richard Jones,
J. Beard Samhill,
R. H. Armſtrong,
W. Bragg,
Peter Rowe,
John Bone.

Profeſſor De Carro's Letter to Dr. Pearson.

Dear Sir,

I CANNOT wait any longer to communicate to you my further ſucceſſes in the Vaccine-pock Inoculation. A dreadful Small-pox epidemic has given, this autumn, a new luſtre to that practice which, according to the ſenſation that it is making in this town, is not likely to be ever laid aſide.

This extenſion of practice, which hitherto is entirely, or nearly ſo, in my hands, has enabled me to eſtimate *the accuracy of your obſervations on the inefficacy of a Cow-pock that comes too rapidly, and which does not follow the laws of that diſeaſe.* I muſt candidly confeſs to you, that till this autumn I had not a very exact idea of the Vaccine puſtule; that is to ſay, I knew very well how it ſhould have been, to be ſimilar to the deſcription of the Engliſh Inoculators, ſuch as I had ſeen it on my own children: but I was not aware that it muſt be abſolutely

abſolutely ſo, and that every appearance after inoculation was not to be looked upon as a true Vaccina. The aſtoniſhing likeneſs of my Vaccine puſtules in my ſixty laſt inoculations, has given me a true knowledge of it; and I ſcarcely believe that I could be in future miſtaken. On the third or fourth day one perceives a ſlight elevation and redneſs; it increaſes in a veſicular form till the twelfth or thirteenth day, and contains always the moſt limpid fluid; a fever comes on the eighth or ninth day, or ſometimes is not perceptible; the beautiful areola appears on the ſeventh day, and increaſes till the cruſt is entirely formed; this cruſt begins, commonly, on the twelfth, and becomes quite black.

I have had ſome caſes originating from Count Mottet's matter, where a patient has received the Small-pox by inoculation, three by natural contagion, and one has retaken the Vaccina in its perfect form. Luckily for the ſucceſs of the inoculation, the parents of theſe children were adviſed previouſly of the idea I had of the imperfection of their former Vaccina, and they were not aſtoniſhed at it, after having had a great difficulty in believing that the ſuperficial cruſt it had formed would not be ſufficient to preſerve them from future infection.

I have had two caſes where the children were already infected with the Small-pox at the time of the Vaccine inoculation, and where it ſhewed itſelf as uſually, without interrupting, in any degree, the courſe of the Cow-pock. One of them proved exceſſively mild, the other is ſtill dubious at the time I am writing.

I have had a Caſe where the inoculated ſpot gave ſigns of inflammation only on the twelfth day, and where the puſtule has been perfectly regular and complete. It was the ſame ſubject that had been, ſeven months ago, inoculated with the imperfect Cow-pock.

I have not yet ſeen any puſtules, either of the *fugitive* or of the *variolous-like* appearance, although, according to Doctor Woodville's obſervation, they ſhould appear more commonly where the Small-pox is epidemic: There never was, perhaps, ſuch a diſaſtrous epidemic at Vienna, as that we have now. It is certainly owing to it that people think ſo much now of the Cow-pock, againſt which they have been exceedingly incredulous. I hope to have it in my power to continue it all the winter.

By the laſt accounts I have of the progreſſes of the Vaccine Inoculation at Geneva, they are exceedingly rapid. They have lately obſerved ſome cruptive Caſes; but I need not enter into theſe particulars, as you will have them immediately from Drs. Pechier and Odier, or from the *Bibliotheque Britannique*.

I have

I have had, lately, two opportunities to make experiments upon perſons who have *undoubtedly* had the Small-pox in their infancy; they are both medical men, and conſequently their teſtimony is more admiſſible than that of moſt men. *Upon one, the Vaccine matter produced no effect whatever; and upon the other, a very ſmall, ſuperficial veſicle appeared, which ſoon changed into a crust.* In one word, there was not the leaſt appearance of the true and uſual Cow-pox puſtule. *They confirm your principle, that one cannot have the Cow-pock after the Small-pox.*

One ſingle circumſtance vexes me in my Vaccine practice: It is the frequency of inoculations that fail; that is to ſay, where no puſtule nor inflammation is produced. I can ſcarcely attribute it to my method, which is the common puncture of moſt practitioners. I make it as ſuperficial as I can, and avoid as much as poſſible to draw blood, which, I believe, can waſh off the matter. I make one puncture on each arm.

I ſee that, in England as well as abroad, Inoculators are divided upon the advantages of the puncture or of the inciſion: You and Dr. Jenner ſeem to make uſe of the puncture; Dr. Woodville recommends ſtrongly the inciſion. At Geneva they prefer the inciſion; and here, the puncture. I propoſe now to make comparative trials, and inoculate my firſt twenty patients at one arm, with the puncture; at the other with the inciſion. The difficulty of making the moſt ſuperficial inciſion, without drawing blood, has made me hitherto adverſe to that method. Upon the whole, I diſlike much to be ſo often obliged to repeat the inoculation. You will oblige me very much to enter with me into ſome particulars upon this point.

My ſecond patient, where the two diſeaſes have gone on together, has had alſo a very favorable Small-pox. Do ſimilar Caſes in England authorize you to believe that the Cow-pock can render the Small-pox milder, when they attack the ſame ſubject together?

The medical world is waiting with impatience for the Work you have promiſed in your *Statement*, *&c.* I join my intreaties to thoſe that muſt already have been addreſſed to you, upon the publication of a Work which muſt throw the greateſt light on a ſubject that engages now the attention of all civilized nations. Whenever my materials ſhall be ſufficient, I propoſe writing a complete Treatiſe on the ſubject, for the uſe of the Continental Phyſicians, and ſuch perſons who are not in the way of collecting from the various torrent of information, which a little zeal and activity have opened to me. I have the honor to be, DEAR SIR,

With the ſincereſt eſteem, &c.

Vienna, Oct. 22, 1800. J. DE CARRO.

P. S. I ſent lately ſome Vaccine matter to Lord Elgin, at Conſtantinople, for the inoculation of his only ſon.

J. Branson's, Esq. Surgeon, Letter to Dr. Pearson.

Dear Sir,

In my last letter to you, I mentioned my ideas respecting the insusceptibility to the Vaccine Contagion in a person who had previously had the Small-pox. I am still of the same opinion, *as I have never yet been able to produce the true vaccine pustule in a person who had before undergone the Small-pox.* But I have lately had a Case, from which it would appear, that if both diseases are introduced into the system about the same time, that they will both be received, and proceed through their regular stages, without being at all affected by each other. — A child was inoculated for the Cow-pock after it had been for some days exposed to the contagion of the natural Small-pox, on Friday, the 26th of September. The arm went on in the usual way, until the Wednesday evening following, when the child was seized with fever; and in the evening of the next day the Small-pox appeared. The eruption was confluent, and particularly so about the inoculated part. On Monday the 6th of October, which was the eleventh day from the insertion of the Vaccine matter, and the fifth from the commencement of the fever of the Small-pox, I inoculated a child from the Cow-pock pustule, surrounded by a cluster of Small-pox; in short, they appeared so blended, that I had my doubts whether the matter I obtained was that of the Cow-pock, or mixed with the Small-pox: Indeed, I was rather disposed to think the latter was the case, as it did not appear so limpid as it usually does in the Cow-pock. However, the result was, that it produced the genuine Cow-pock, without any appearances different from what I have always seen; and with matter from this source I have continued to inoculate ever since, without any variation either in symptoms or appearance. If this Case furnishes you with any thing new on the subject, I shall be very glad: I have no time now to make any comments upon it, as the Post-office is just going to shut. I am,

Dear Sir,

Your's, sincerely,

Doncaster, Nov. 23, 1800. J. BRANSON.

P. S. Since I wrote last to you, I have inoculated upwards of five hundred for the Vaccine Disease, without any unpleasant symptom.

To

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

I Should be ſorry to excite prejudices in the minds of your readers, or of the public, againſt the introduction of the Vaccine Diſeaſe as a ſubſtitute for the Variolous, being well convinced that, in many reſpects, much preference is due to it, and that great credit attaches to thoſe gentlemen who have ſo meritoriouſly ſtepped forward in its ſupport; but I have to lament, that its advantages are ſomewhat over-rated, when we are told, from reſpectable authority, that it is a diſeaſe free from danger, and that, when introduced by inoculation, the ſymptoms in children are uniformly mild, from the inſertion of the matter to the period of ſcabbing. It is a great misfortune, that proſelytes to new ſyſtems do not always carefully examine into opinions handed down from high authority, but give them implicit credit; and it is equally unfortunate, that, in the recommendation of any new doctrine, the unfavourable ſymptoms are too frequently placed in the back ground, and only the more pleaſing ones expoſed to public view.

Occaſionally we hear of patients inoculated with Vaccine matter who have had the diſeaſe with ſome ſeverity, but we are not told in what the violence of it conſiſted.

In the two caſes I ſhall take the liberty of laying before the public, there are ſome circumſtances which are by no means explicable by any account I have yet heard of the diſeaſe; and though ſymptoms ſomewhat ſimilar are recorded in No. XXII. of your uſeful Medical Journal, yet, in many reſpects, the facts will be found to vary much.

In thoſe caſes the ſymptoms were extenſive eryſipelas, ſpreading rapidly from the inoculated part, accompanied by conſiderable conſtitutional affection. Theſe caſes were ſubmitted to the inſpection of Drs. Wollaſton, Pearſon, Griffiths, and Crofts, whoſe opinions were, that the unfavourable ſymptoms aroſe from the matter with which the children were inoculated having been taken at a late period of the diſeaſe, after a brown ſcab had formed, and when it had acquired a purulent appearance, and conſequently had, by degenerating, loſt the power of giving the Cow-pox infection. This opinion was alſo ſanctioned by Dr. Lettſom, who ſaw the patients.

I know many inſtances where Vaccine matter has been taken from the arms of patients as late as the eleventh and twelfth days, when it had acquired a purulent appearance, and a brown ſcab had formed, which matter has been inſerted into the arms

of children, on whom it has produced a very mild diſeaſe, and from whom fluid matter has been taken to inoculate others, who have alſo had the diſeaſe in a manner equally mild. It will be difficult to reconcile theſe facts, which are atteſted not only by my own experience, but by that of ſome very reſpectable ſurgeons in this place, with the opinions advanced, that matter taken at ſo late a period loſes, by degenerating, the power of producing the diſeaſe.

On the 22d of October, 1800, I inoculated Mr. Hulſe's child, aged ſix months, with fluid matter taken on the eighth day from the arm of a child who had the diſeaſe very favourably. Until the eighth day, appearances were promiſing, and indicated a mild diſeaſe; but on the ninth, the parts ſurrounding the inciſion began to inflame, and became very hard: The inoculated part, inſtead of putting on a puſtular appearance, degenerated into an ulcer, and at this time much derangement of the ſyſtem took place, as fever, ſickneſs, and great inquietude.—I applied emollient cataplaſms to the arm, and dreſſed the ſore with equal parts of ungt. hydrarg. nitrat. and ungt. ceræ, notwithſtanding the uſe of which, and warm fomentations, &c. the parts changed their appearance very little until the ſixteenth day, when the inflammation extended to the ſhoulder and hand, on the fingers of which, ſeveral veſications appeared. While theſe parts became the ſeat of diſeaſe, the inflammation completely left the inoculated part, and the ulcer acquired a healthy aſpect. As the inflammation left the hand and ſhoulders, it ſpread to the back, breaſt, and face, on the ſame ſide, and after remaining there about twenty-four hours, it diſappeared, leaving the parts very much diſcoloured, and attacked the other ſide of the back and breaſt, and afterwards the arm and hand; but before it became ſo violent as on the ſide firſt affected, the child was exhauſted by want of reſt and exceſſive irritation, and died on the twenty-ſixth day after inoculation. It is right to ſtate, that on the twelfth day, the nurſe who ſuckled this child, was taken ill of an inflammatory rheumatiſm, and continued ſo during the time it lived; and as it refuſed almoſt every other kind of food but the breaſt milk, I fear its ſymptoms might be increaſed, by the neceſſity we were under of allowing it the breaſt to keep it quiet and give it nouriſhment. Not having ſeen or heard of any caſe ſimilar to this, I was willing to attribute the ſymptoms to accidental cauſes; but, a few weeks afterwards, another caſe occurred, which, from its near reſemblance to this, convinced *me* they were the conſequence of the Cow-pox.

On the 27th of November, I inoculated in both arms a very healthy child of Mr. Green's, of Lenton Abbey, aged

five

five months, with fluid taken on the ninth day from the arm of a child equally healthy. Previous to the eighth day there was no appearance which indicated any thing unfavourable. The inciſions in each arm were gradually elevated into ſmall puſtules, filled with limpid matter, with a ſmall inflammation round their baſe. On the ninth day the inflammation on the left arm ſpread very rapidly, and before the next day it occupied the whole arm, but without any veſications, as in the preceding caſe By the twelfth day the inflammation was much diminiſhed on the arm, but appeared on the back, breaſt, and face on the ſame ſide. At this time the inciſion on the left arm, which, on the tenth day, had degenerated into a ſordid ulcer, became almoſt dry, and began to form a ſcab, the inflammation ſurrounding it being intirely gone. After the inflammation had continued on theſe parts about twenty-four hours, it removed to the right arm, which was now dry, and had ſcabbed over.

It extended from the ſhoulder to the elbow, and alſo affected the right ſide of the body in a ſimilar manner it had the left, and after having exerciſed a kind of ſportive fancy on different parts of the body, for at leaſt five weeks, a ſmall abſceſs formed in the axilla, on the right ſide, and the child perfectly recovered. The inciſions in both the childrens' arms were made very ſuperficial and ſmall, and the matter was uſed a few hours after it was taken, being firſt diluted with a little warm water.—Mr. Green's child was at its mother's breaſt, and had it not experienced the moſt unremitting attention, I have much reaſon to fear, the conſequences might have proved ſerious. From this child's right arm I took ſome matter on the ninth day, with which I inoculated two children, each of whom paſſed through the diſeaſe as favourably as any I ever ſaw.

Theſe facts are moſt impartially related, and no circumſtance is omitted which I thought worthy attention. I believe, after all, we muſt refer much to idioſyncraſy; and as it frequently occurs in the variolous diſeaſe, that two children inoculated with the ſame matter, and apparently under ſimilar circumſtances, ſhall be very differently affected, ſo it will occaſionally happen to thoſe inoculated with Vaccine matter. I am, &c.

Nottingham, Jan. 8, 1801. B. MADDOCK.

To Dr. BATTY.

My dear Sir,

YOU will excuse my troubling you with this note, concerning an Error which has been committed in the printing off the sheets of my Communications on Diabetes, in the last Number of the Medical Journal. I find that the pages have not been printed off in the order in which they were written, so that in the perusal a great want of method and arrangement must necessarily arise. This being the case, I have to ask it as a favor of you and your Colleagues, that you would print in a conspicuous part of the next Number of your Journal, (and not among the Errata) an address to your Readers, requesting them, in looking over my Remarks, to insert the paragraph, at the foot of the 66th page, beginning with the words, "And in treating of the extractive matter," *together with all the following paragraphs immediately before the paragraph in page* 62, *beginning with the words,* "But in speaking upon this subject;" *by which insertion the order will be restored, and the Error corrected. I am, &c.*

Norwich, Jan. 1, 1801. *R. LUBBOCK.*

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

ABOUT seven o'clock on Wednesday evening, (Dec. 31) a hurrying message was brought, requiring Mr. Chamberlaine's attendance to a young man who had swallowed, with an intention of putting an end to himself, a quantity of laudanum.

Mr. Chamberlaine being at that time at some distance, I offered my services, which were accepted; and knowing no time must be lost, I took with me 3ss. of ipecacuanha, and six grains of tartar emetic. I found the young man in a state of insensibility, the pupils of the eyes widely dilated; pulse irregular, and scarcely perceptible; subsultus tendinum; stertor; cold sweats, and every bad symptom.

A phial which, when full, might contain an ounce and a half of laudanum, was produced. On inquiry, I learned that he had brought it home quite full; he had taken the largest half, or rather more than six drachms: and from every circumstance that could be collected, a space of time not less than fifteen, or perhaps, even twenty minutes, must have elapsed before it was discovered that he had taken it; and some minutes more elapsed,

elapſed, of courſe, while aſſiſtance was ſought after. The emetic I brought with me I mixed in ſome warm water, and his mouth being opened with ſome difficulty, it was poured in; but finding that this produced only two convulſive motions of the ſtomach, I haſtened home, (ordering the people with him to keep him in continual motion, and on no account whatever to ſuffer ſleep to come on) and returned with two papers, the one containing ℈ſs. and the other ℈j. of zincum vitriolatum, with a ſmall quantity of tartar emetic: I gave him the former one directly, and the latter in about four minutes after, drenching him with great quantities of warm water. This rouzed him a little; but ſtill, as it only vomitted him twice, and that not in ſuch a manner as I could depend upon for the preſervation of his life, I again went home, and returned with two papers containing ℈j. in each. I now found convulſions and ſtupor coming on very quick, in a greater degree than at firſt, with his teeth claſped, and pulſe ſtill more weak and irregular; I forced open his mouth, and poured down the ſolution of zincum vitriolatum, continuing to give him plenty of warm water, and followed up this quantity with the ſecond; in about five minutes theſe vomitted him twice very well, and on my repeating the warm water, in which I diſſolved ℈ſs. of zincum vitriolatum, they vomitted him in ſuch manner, as to put him out of all DANGER. The convulſive motions of the upper extremities now began to go off by degrees, and every other dangerous and alarming ſymptom, peculiar to this narcotic drug, to ſubſide. I ordered him to be walked about the room at intervals, and to be kept awake for upwards of ſix hours. He felt his ſtomach and throat very rigid and ſore the enſuing morning, but when I went in the evening, accompanied by Mr. Chamberlaine, he was perfectly recovered; and on viſiting him ſince then, found him perfectly well and very thankful. I am, &c.

Ayleſbury Street, Clerkenwell,
Jan. 5, 1801.

CHARLES COLLIER.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

THE laſt Number of your very uſeful Journal contains an intemperate letter, addreſſed by Dr. Ferriar, of this town, to Dr. Batty, in which the Doctor attempts to vindicate himſelf againſt two charges, publiſhed in my Eſſay on Phlegmatia Dolens,

lens, namely, of *borrowing* his account of the theory and cure of this diſeaſe from Mr. Trye's *Eſſay on the ſwelling of the lower extremities incident to lying-in women*, and of *miſrepreſenting* the caſe of Jane Waters.

The remarks I ſhall now make upon the Doctor's letter, will, I doubt not, convince your numerous readers, that both the charges are well founded, and that the Doctor would have acted more prudently, if he had not publiſhed his vindication.

Dr. Ferriar declares, that he derived his opinion of the nature of the diſeaſe from the evidence of his ſenſes, without obligation to any preceding writer, and that his method of cure was directly deduced from that opinion: He further declares, that he has never *read* Mr. Trye's publication, which I have mentioned as the ſource of his opinion; but he acknowledges that he had heard ſome account of it; for he ſays, "I underſtood, however, at the time of publiſhing my Obſervations, that he" (Mr. Trye) "confined his views entirely to the diſeaſe in the puerperal ſtate."

That the Doctor has actually *read* Mr. Trye's Eſſay I cannot prove by poſitive teſtimony; but I am able to adduce a chain of circumſtantial evidence, which, I think, will leave no doubt on the minds of your readers, that he has at leaſt *peeped* into the book, and has gleaned from it the principal doctrines contained in his own paper. Mr. Trye's work is in the Library of the Mancheſter Infirmary; and I have good authority for ſaying, it is the uniform practice to circulate the pamphlets on medical ſubjects amongſt the Faculty of that Charity, ſoon after their introduction into the library. Hence it would appear, that this book has been *once* thruſt into Dr. F's hands, and it has been *very often* before his eyes: And when we conſider with what eagerneſs the Doctor has hunted out curious and ludicrous extracts, in order to cram them into his indecent *Illuſtrations of Sterne*, it ſeems highly improbable, that, when he was engaged in writing his diſingenuous attack on Mr. White's Theory of Phlegmatia Dolens, he would omit conſulting the only other book at that time written in the Engliſh language expreſsly on the ſubject of this diſeaſe. Moreover, the points of coincidence in Mr. Trye's and Dr. Ferriar's Eſſays are ſo numerous, that, in my opinion at leaſt, this circumſtance alone is ſufficient to prove them to be *not accidental*. Mr. Trye has endeavoured to prove, 1ſt. *That Mr. White's theory of the diſeaſe is not well founded:* 2dly. *That the proximate cauſe of the diſeaſe is an inflammation of the lymphatic glands or veſſels:* 3dly. *That the diſeaſe occurs in perſons, independently of parturition:* And, 4thly. He has pointed out a *method of cure, founded on his own opinion of the nature of the diſeaſe, which conſiſts in the application of leeches and bliſters to the*

the limb, &c. Dr. Ferriar has gone over the same ground, after the short interval of about six years, and yet contends for the originality of his own doctrines! When I gave an Analysis of Dr. F's Essay, it did not occur to me that the Doctor considered as an *original suggestion*, his opinion that the disease sometimes happens to persons not in the puerperal state; otherwise I should *then* have proved, that Mr. Trye had anticipated him in this as well as in every other material circumstance. — Permit me, therefore, to lay before your readers the annexed passage, from the 45th page of Mr. Trye's Essay: "Lastly, this kind of swelling of the leg, thigh, and buttocks, is not peculiar to women who have suffered parturition; I have seen it come on, nearly in the manner which Mr. White describes, in a person who had suffered greatly from a retention of urine and inflammation of the bladder. No circumscribed tumour could be felt in the iliac regions, therefore it is probable that there was a swelling of the internal iliac glands, excited by some acrid matter absorbed from the bladder. The disease was cured by frictions of mercurial ointment."

I am much deceived, if I have not satisfactorily shown in another place,* that Dr. Ferriar did not find, as he has asserted, the lymphatic vessels inflamed or enlarged in the limb of Jane Waters. Whether the superficial lymphatics were inflamed, enlarged, and entwisted like bundles of cord, in the limb of the anonymous gentleman whose case he has related, may with reason be doubted. It is generally understood by the professional gentlemen at Manchester, that Mr. T. W. of P. is the gentleman alluded to by Dr. Ferriar; and if this opinion be correct, I am informed that the limb has ulcerated since the Doctor attended him, and that the Doctor has mistaken the limb in his Report. How many other errors he may have committed, with respect to this case, I cannot determine; perhaps he may have mistaken varicose veins for lymphatics!

Having now, I presume, substantiated the charge of PLAGIARISM, by *circumstantial evidence*, as completely against Dr. Ferriar as he himself has done against the celebrated author of Tristram Shandy, I shall next proceed to prove, by *positive evidence*, that he has most grossly MISREPORTED the Case of Jane Waters.

Dr. F. states in his letter, that his Report on the 21st of January runs thus: "The affection of the limb is completely removed. She has no complaint excepting debility, and a cough which she had contracted previously to her lying-in." To establish the accuracy of this Report, he tells us, that "Home-

* See Essay on Phlegmatia Dolens, p. 107.

" Home-patients of the Manchester Infirmary are those who are attended at their own houses;" that " Out patients are those who are able to come for their medicines to the Dispensary on stated days." That " on referring to the list of home-patients, he finds Jane Waters was made an out-patient on the 27th of January, 1798;" and that " the evidence of the home-patient book must prove, that she was able to walk abroad on the 27th of January, 1798." This is the point at issue betwixt us. I contend that the Doctor's definition of an out-patient is incomplete; that there are out-patients of the Manchester Infirmary, who are not able to go for their medicines, and that the evidence of the home-patient book does not by any means warrant the Doctor's conclusion. I have already shewn, (Essay, p. 112,) from the positive declaration of Jane Waters, that whilst she remained in Manchester, which was about a month after her delivery, the swelling of her limb did not abate materially, nor did she attempt to clean out her room," and that " she was never able to walk, or stand, whilst she staid in Manchester." To her own testimony, I now beg leave to add that of her husband, as transmitted to me in the following note.

" Mr. Tomlinson presents his respects to Dr. Hull, and informs him that, agreeably to his request, he has this day called upon Jane Waters, of Ashley Yard, Fennel Street, Manchester; that she has given him the same account of the circumstances of her case, that is stated by Dr. Hull; and her husband has also declared to him, *that she never was able to walk during her stay in Manchester, after the swelling of her limb came on*; but that she was carried down stairs on Monday, the 22d of January, 1798, in order to be placed in the coach, which conveyed her to her father's house at Newton Heath, and that she remained unable to walk for eleven weeks longer, when the abscess in her loins broke, and she gradually recovered."

King Street, Jan. 8, 1801. (A Copy.)

It may be proper to observe here, that Newton Heath is at the distance of three miles from Manchester; if, therefore, she continued to be a patient of the Manchester Infirmary, she must necessarily be an *out-patient*, as she was removed far beyond the limits within which the physicians are required to visit home-patients.

Dr. Ferriar says, that in opposition to the *facts* stated by him, I have produced a " narrative without some essential dates," and he is " *sorry to say*, without probability." The Doctor's

Doctor's objection to a want of dates is, I truſt, ſatisfactorily obviated by the above note: And I think he has committed an error in obſerving, that he is *ſorry to ſay my narrative is without probability.*

To invalidate the evidence of Jane Waters, he calls her a poor ignorant creature, and intimates, that her recollection of the circumſtances of her complaint muſt neceſſarily be *confuſed* at the diſtance of nearly two years. To obviate the latter objection it may be ſufficient to obſerve, that I have learnt within theſe few days, from a profeſſional gentleman of great eminence, and on whoſe veracity I have a perfect reliance, that ſhe gave *him* an account of her caſe, very ſoon after her recovery, which agrees with that publiſhed in my Eſſay on Phlegmatia Dolens, and is, conſequently, contradictory of Dr. Ferriar's report in the moſt eſſential circumſtances. That Jane Waters is ignorant, compared with the Doctor, muſt be allowed; but ſhe appears to be as intelligent as women in her ſituation uſually are, who in general remember extremely well the circumſtances attending their labours and lyings-in, theſe being amongſt the moſt important occurrences of their lives. And here let me aſk, whether learning is requiſite to enable a woman to ſpeak accurately to ſuch circumſtances as are given in my ſtatement of her caſe? Will a Court of Law require, that a woman ſhould have read Valentini Novellæ Medico-Legales, Taliacotius de Curtorum Chirurgia, Beroalde, Bruſcumbille, &c. &c. before ſhe can be enabled to tell how many months elapſed after delivery, before the ſwelling of her limbs ſubſided, and ſhe regained the power of walking? Will the Court of Honour, to which the Doctor has poured out his pitiable complaints, deem it neceſſary, that Jane Waters ſhould be as deeply read as Dr. Ferriar, in order to tell truly, whether the ſwelling of her limb was removed in three weeks, or in four months? I preſume they will not. Will Dr. Ferriar, though aided by his notes, and the evidence of the Home-patient book, (which he muſt know does not prove what he has contended for) aſſert, in oppoſition to the poſitive evidence of two credible witneſſes, that Jane Waters was able to walk to the Infirmary on the 27th of January, 1798? Will he contend, that ſhe was able to walk abroad on that day? Will he perſiſt in ſaying that ſhe was ever able to walk acroſs her room, whilſt ſhe was under his care?

I ſhall conclude my remarks upon this part of the Doctor's letter, by ſtating, that I believe Jane Waters's account of her own caſe, as publiſhed in my Eſſay, will by the generality of readers be deemed correct, whilſt the Doctor's report will be regarded as ſmelling ſtrongly of the *Farrier's* ſhop, where the

foot is not uncommonly adapted to the shoe, instead of the shoe being adapted to the foot.

One part of Dr. Ferriar's letter still remains to be attended to. He *denounces* my Inquiry into the case of Jane Waters as an offence of a most serious nature, and declares, that I shew a total disregard to professional character by an avowal of it. When the consequences of this inquiry are considered, the Doctor's denunciation is not to be wondered at. He must necessarily be galled to find it proved to the medical world, that his history of the case is grossly misreported, and that his *original* opinions, relative to the cure, theory, &c. of Phlegmatia Dolens, were published six years before, by Mr. Trye.

Towards a man, who had enlisted under the banners of Mr. Simmons, and attacked me in the manner he has done, I do not think it necessary to conduct myself with more delicacy, or less severity. If Dr. Ferriar should henceforward be deemed a Copyist, and his Medical Histories be considered as wanting the stamp of authenticity, he has only himself to blame. He should have repressed the ill-natured and ill-founded Remarks, which he made upon the Second Part of my Observations on Mr. Simmons's Detection, when voted into the library of the Manchester Infirmary, if he expected, or wished, the veil not to be withdrawn from his errors.

An, si quis atro dente me petiverit,
Inultus ut flebo puer? HOR. Epod.

Manchester, Jan. 13, 1801. JOHN HULL.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I Have not been inattentive to the utility or celebrity of your Medical Journal; and although I have no relish for controversy in general, yet, a Case of Monstrosity recorded in your 19th Number, by Mr. Simmons, appears highly curious, and deserving of further consideration. Every one who contemplates the endless varieties of animated Nature but with the slightest attention, must admit of the astonishing wisdom with which all beings, but particularly those endowed with intelligence, are adapted to the different modes of existence for which Providence has designed them. The philosopher must frequently lament, that aided by the profoundest accuracy and perseverance, he can yet ascend but so few steps in discovering the essential operations of mind on matter: Could we once dispel the

the cloud that obſcures our faculties on this point, phyſiology would acquire ſomething like demonſtrative truth. Although the preſent age is particularly diſtinguiſhed by its thirſt for experiment, and a ſcrupulous adherence to facts on moſt ſubjects of ſcience, yet, a further deſideratum is no leſs neceſſary; namely, caution in generalizing our ideas. We muſt keep in view this axiom, that "poſt hoc, ergó propter hoc," is not always in phyſiology a legitimate concluſion. I ſhall briefly notice a few particulars in the caſe in queſtion, and then take the liberty of ſuggeſting ſuch ideas as my own conſideration of it has furniſhed me with, with due deference, however, to the author of the paper, who is certainly entitled to the thanks of your readers for the communication. I beg leave to premiſe one or two obſervations in this place, and particularly, that caſes of ſuch a ſingular deſcription as the preſent, ſo far from removing the difficulties that occur with reſpect to the illuſtration of the phyſiology of the brain and nerves, rather indicate the ſimple proviſions which Nature can employ in continuing the exiſtence of the human fœtus. The author's mode of reaſoning in the inſtance before us, is not unlike that of a natural philoſopher, who would ground the fundamental ſyſtem of the laws of motion on the eccentricities of a comet. I will juſt quote a paſſage from Steno, which the immortal Winſlow has ſubjoined to his Anatomy of the brain:—"The ſoul which imagines it can penetrate into every thing without it, and that nothing can ſet bounds to its knowledge, is nevertheleſs utterly at a loſs to deſcribe its own habitation, and is no where more to ſeek than at home."—Mr. S. obſerves, that there was nothing preternatural in the ſtructure or relative ſituation of the thoracic and abdominal viſcera, and that they were all ſupplied in the uſual manner with their proper nerves. He ſays, below the occiput there was a conſiderable diſplaced portion of vertebra, both cervical and dorſal, and in theſe parts he found no veſtige of medullary matter; conſequently, I am at a loſs to conceive how he diſcovered the origin of the phrenc. nerve, and the origination of the axillary plexus; for he ſtates, that the upper extremities were furniſhed with their proper nerves. I am induced to hazard a conjecture, that the above caſe was a morbid one in utero, and that it was not originally conſtituted in the ſituation it preſented itſelf in at the birth; particularly, as I am ready to agree with the author in part, that the connection between the brain and circulation of the blood in the fœtal ſtate, is not ſo obviouſly neceſſary. It may not be very remote from the truth, to conſider it as a malformation, produced by partial abſorption; this, however, is merely offered as a query. I am, however, much againſt the author's general

doctrine, which he has thought so clearly deducible from this instance: First, that nervous influence is not at all necessary in the evolution of the fœtus; indeed, it is answered by the universal existence of a brain and nerves in the fœtus; and it is well known, that the head is one of the first parts of the structure of every animal that manifests itself after conception; and therefore, we are surely not to refuse our belief in the importance of this system, merely from a solitary exception. The second position, viz. "that the fœtus in utero does not possess sensation," is not less liable to animadversion, since, from the different stages of its evolution, Nature has appeared to have intended, that the brain in particular should arrive very slowly at perfection; between the extremes of simple sensation and refinement of intellect, the links must surely be very remote. It is perfectly consonant to the soundest wisdom to believe, that a part which was to be the centre of all our thoughts and affections, should receive accessions of physical strength in proportion to the necessary demands of the animal; if so, it is more reasonable to hazard an opinion, (which, however, can only rest on that basis) that the brain and nerves furnished an important part in the human frame ab origine; and that so far from being a work of supererogation at this period, ought we not to conceive it as an additional argument in proof of the unerring rules of Providence, displayed alike in every part of the animal creation? Although I have ventured to regard this case as denoting partial disease, still, the healthy appearance of the child otherwise, may be thought to weaken this supposition; nevertheless, the author's conclusions are equally liable to our exception. The duplicature of membrane within the cranium and spinal canal, would seem to favour the opinion of the primary existence of medullary substance, since such a protection to these parts would seem, a priori, quite superfluous. With regard to the functions of respiration and sensation being coeval, it does not appear strictly necessary, since the former, in many instances, is perfectly involuntay, and in this respect, coincides with the œconomy of the heart. In the case before us, one thing is worthy of observation, that, notwithstanding the want of cerebrum and cerebellum, yet we find that the nerves were all within their usual course, (except the optic and recurrents, which were not included in the description) as if they imparted some influence, independant of the grand source of sensation; this idea is cursorily intimated by the ingenious Dr. Baillie in his Morbid Anatomy. Before I conclude, I shall just observe, that I have seen an instance of an arterial system without a heart, in a small fœtus, at about the fifth month; the aorta with its curvature, supplied its place. Whatever ana-

logy

logy may be drawn from this fact, I shall forbear to point out, since truth, not disputation, is the object of my researches.—Thus, gentlemen, I have presumed to offer a few reflections, which might be usefully extended on so interesting, but abstruse, a branch of physiology as the present; and if they should accord with the spirit of your very valuable Journal, you are at full liberty to insert them. I am, &c.

Cowbridge, South Wales. JOHN SYER.

CRITICAL RETROSPECT

OF

MEDICAL AND PHYSICAL LITERATURE.

[FOREIGN AND DOMESTIC.]

Geschichte der Chemie; i. e. History of Chemistry, from the Restoration of Sciences to the end of the Eighteenth Century, by J. F. GMELIN, Professor at Gottingen, Vol. I. 1797, pp. 777, 8vo. Vol. II. pp. 790. Vol. III. pp. 1287.—1798, 1799. Gottingen, for Rosenbush.

WE ought to apologize for being so late in acquainting our readers with a work that may undoubtedly be considered as a very acceptable present to chemists. The author is a man sufficiently known by the extent of his literary knowledge in chemistry, and by the superiority of his learning, which, beside his particular merits as a chemist, render him chiefly calculated for the composition of such a valuable work; and in considering the labour and indefatigable diligence that is bestowed upon it, and which few men, even when furnished with an equal stock of abilities, will hardly undergo, we should sincerely acknowledge the merits which Mr. Gmelin has acquired by that undertaking, and willingly confer on him that praise which he so justly deserves. We cannot, therefore, but disapprove the criticism that is written on it by a German Reviewer, who seems not to conceive how indulgently such a laborious work ought to be contemplated, and how slight defects, and trivial in-accuracies, are absorbed and lost in general excellence.

In the preface, the author acquaints his readers, that it is his intention, as a true historian, to be partial to no sect, but to follow the paths of truth and impartiality, and neither blindly to adhere to the old doctrines, nor implicitly admire the innovations with contempt of the old.

The

The introduction presents, in agreeable language, a sketch of the progress and changes which chemistry has experienced from its infancy to the present age, and of its state in the different periods and junctures of time. The history of chemistry may be divided *into two chief periods, that* which precedes the institution of learned Societies, comprehending the twelfth and the following centuries, and *that* from the seventeenth century to the present times. In the first time of the former period, chemistry was merely in the hands of the Arabs, which the author, therefore, calls *the age of the Arabs.* The Europeans, however, who followed them, being instructed in their schools, retained, for a long time, their method, doctrines, and prejudices; on which account he stiles it *the age of the Arabists.* This was succeeded by the *scholastic age,* when every science was treated and cultivated after the scholastic manner. The fourth age is that of *Paracelsus,* when that adventurer obtained a superior influence in medicine and chemistry. A great animosity prevailed about that time between the followers of Paracelsus and those of the old doctrines, which parties some enlightened men endeavoured to reconcile; and thus arose, in the first quarter of the seventeenth century, *the age of the Eclecticks;* but as Francis Sylvius de la Boë acquired a particular fame by his doctrines, *the age of Sylvius* was constituted in the second quarter of the seventeenth century. The second chief period is likewise divided into several sections; but the following survey will show the order after which the whole is disposed.

I. Middle History, from the twelfth century to the middle of the seventeenth. 1. *Age of the Arabs*; twelfth century, with a part of the thirteenth. 2. *Age of the Arabists*; the rest of the thirteenth century to the beginning of the fifteenth. 3. *Scholastic age;* fifteenth century to the beginning of the sixteenth. 4. *Age of Paracelsus*; the rest of the sixteenth century. 5. *Age of the Eclecticks*; first quarter of the seventeenth century. 6. *Age of Francis Sylvius de la Boë*; second quarter of the seventeenth century.—All this comprehends the first volume.

II. Modern History, from the middle of the seventeenth century, to the end of the eighteenth. 1. *Age of Robert Boyle*; from the middle of the seventeenth century, to the end of it. 2. *Age of George Ernest Stahl*; from the end of the seventeenth century to the last quarter of the eighteenth; contained in the second volume. 3. *Age of Lavoisier*; from the last quarter of the eighteenth century, to the present times, contained in the third volume; but, by a mistake of the printer, a part of the former age has got into this volume.

The author has given an additional value to his work by the accurate and complete quotations of the different writings of all ages; and, in this respect, it may be considered as the completest repertory for chemical literature.

Triumph

Triumph der Heilkunſt; i. e. Triumph of Medicine, or practical Inſtruction for ſuccouring the moſt desperate morbific Symptoms, explained by Facts: A Repertory for Phyſicians and Surgeons. Edited by Dr. Chr. Aug. Struve, Practitioner at Goentitz, Vol. I. Breſlau, Hirshberg and Liſſa, for Korn the Elder, 1800, in 8vo. (price 1 rixd. 8 gr. or about 4s. 6d.)

The author explains the title of this publication in the preface as "A collection of hiſtories of diſeaſes, which, under the greateſt dangers, and moſt unfavourable ſymptoms, ended in a moſt favourable way; inſtances of the application of heroic remedies and great operations, and of the perſeverance, preſence of mind, and courage of phyſicians in the moſt deſperate diſeaſes." The inſtances and caſes are, for this purpoſe, collected from old and modern medical writings, and the author intends to increaſe them, in caſe his plan ſhould meet with approbation. He profeſſes himſelf, that a great deal of Triumph, in moſt of thoſe caſes, is more owing to Nature than to Art. It were to be wiſhed, the author had followed a better order in executing his plan, which, however, is ſomewhat retrieved by an alphabetical regiſter, added at the end of the book.

Grundriſs der Chemie; i. e. Elements of Chemiſtry, after the neweſt Diſcoveries, and calculated for the Uſe of Lectures; by Fred. Albr. Charles Gren, Profeſſor at Halle, Vol. I. ſecond edition. Halle. 1800. 8vo. (price 1 rixd. or about 3s. 6d.)

The firſt edition of this excellent book is known to our readers by a good tranſlation into Engliſh. The preſent one, which has been reviſed, after the death of the author, by Mr. Karſten, at Berlin, has undergone but few alterations, either relating to ſome later diſcoveries, or containing ſome little corrections. Thus, for inſtance, the auſtral earth is omitted amongſt the elementary earths; in lieu of which, the glycine, according to Vauquelin's diſcovery, is adduced. The ſecond part is to follow in a ſhort time.

Traité du Goitre et du Cretiniſme, precédé d'un Diſcours ſur l'Influence de l'Air humide ſur l'entendement Humain; *i. e.* Treatiſe on the Wen (Bronchocele) and Cretiniſm, preceded by a Diſcourſe on the Influence of moiſt Air on human Underſtanding. By F. E. Fodere, &c. Paris, for Bertrand, year 8, 1800, pp. 248, in 8vo.

The author, who is already known by his inquiries into the above diſeaſes, gives, inſtead of a preface, a previous explanation of the word *Cretiniſm*: "The wen (goitre), he ſays, is ſufficiently known, becauſe it is met with in every country; but not every reader will probably underſtand what the word *Cretiniſm* ſignifies. It is derived from *Cretin*, a name that is given in certain countries to individuals who are perfectly ſtupid, or fools, and who are likewiſe called idiots, &c. The word *Cretin* itſelf comes from Chretien, bon Chretien

Chretien (Chriſtian, good Chriſtian) a title given to thoſe idiots, becauſe they are thought not to be able to commit any ſin. I have adopted this appellation in preference to any other, becauſe the individuals to whom it belongs, are more than idiots, and deſerve a particular name."

In the introductory diſcourſe, the Author examines the influence of moiſt air on the human underſtanding. The Treatiſe itſelf is divided into four ſections. *The first Section* treats of the wen or bronchocele (goitre) of the countries where it is found, of the individuals who are moſt expoſed to it, of the cauſes by which it is produced, and of the different remedies. The Author thinks the remote cauſe to be the humidity of the atmoſphere, and the proximate cauſe a compreſſion or obſtruction of the muciferous canals of the thyroid gland. In *the second Section*, Mr. Fodéré gives the hiſtory of the complete and incomplete Cretiniſm, which is propagated by generation, particularly by the father. The object of *the third Section* is an enquiry into the general cauſe of Cretiniſm and Bronchocele. After having given the topographical and meteorological deſcription of thoſe valleys where theſe diſeaſes particularly occur, and propoſed the different hygrometric experiments made for that purpoſe in different places of the valley of Aoſta, the Author ſtates, that the moiſture of the atmoſphere is likewiſe the cauſe of Cretiniſm; and he endeavours to refute ſome other opinions relating to this diſeaſe, viz. of cold, of diſeaſes of the ſkin, of drunkenneſs being the cauſe of Cretiniſm. In *the fourth Section* the Author ſhows the phyſical and moral remedies that may be employed in preventing the Wen and Cretiniſm. Although theſe diſeaſes ſeem at firſt ſight to be peculiar to the nature of the ſoil, yet by obſerving that the number of Cretins has conſiderably decreaſed in ſeveral places, in conſequence of ſome natural revolutions, and other changes produced by the hands of men, one is entitled to think, that it is poſſible to ſtop the farther progreſs of Cretiniſm by following the rules which experience has furniſhed, and which the Author explains in this ſection; where, at the ſame time, he propoſes a plan of regimen capable of contributing to diminiſh the number of thoſe unhappy creatures. We cannot but ſincerely wiſh, on account of the extreme degradation of human nature in the Cretins, that the philanthropic ideas of the author may be every where realized.

The diminution of the number of *Cretins*, is particularly to be attributed to the draining of the fens, to the more healthy diſtribution, and ſituation of the huts and cottages, the clearing of the woods, &c. by which a conſiderable change in the temperature is produced; and, finally, to the progreſs which of late has been made in education and civilization. The author indicates the proper proceedings for diminiſhing the moiſture of the atmoſphere of the Sub-Alpine valleys, and the means of ſtrengthening the body againſt its noxious influence. The laſt chapter treats of the moral education which is moſt proper to the inhabitants of the Alpine valleys, and on the means of improving the ſituation of the

the unhappy Cretins, and of making the Half-Cretins uſeful to the community. We conclude the account of this work by remarking, that it is undoubtedly claſſical on thoſe diſeaſes, and particularly on that deficiency of the human underſtanding, to which the appellation of Cretiniſm is aſſigned, and which ſeems to be indigenous and endemic in the valleys of the Italian and Swiſs Alps.

Hiſtoire Naturelle des Salamandres de France; précedée d'un Tableau Methodique des autres Reptiles indigénes: i. e. Natural Hiſtory of the Salamanders of France, preceded by a methodical Table of other indigenous Reptiles, with ſix coloured plates. By P. A. Lacretelle, Aſſociate of the National Inſtitute, &c. Paris, for Villers, year 8, 1800, in 8vo. pp. 47 and 61.

Cit. Lacretelle had already preſented, in the year 5, 1797, to the Mathematical and Phyſical Claſſes of the National Inſtitute, a Memoir on the Salamanders of France, which was very favourably received, and ordered by the National Inſtitute to be printed with the Memoirs of the Foreign Literati. Since that time, however, the author has made new inquiries, of which he has publiſhed the reſults in the work we are here announcing. It is divided into two parts; in *the firſt* of which, Cit. Lacretelle propoſes a methodical arrangement of the other indigenous reptiles, after the claſſification of Cit. Brongniart. In *the ſecond*, he proceeds to the natural hiſtory of the ſalamanders of France. After having mentioned the modern naturaliſts who have written upon this ſubject, and ſhowed how unſettled is the nomenclature of theſe animals, what they ought to take in the ordines naturales, the author treats of their organization and œconomy, compared with that of other reptiles; of their retirement and re-appearance; and inquires how far we know the generation of the terreſtrial ſalamander; and then proceeds to ſpeak of the act of generation among the aquatic ſpecies, on the diſpoſition of their eggs, &c. on their developement, &c. and on their faculty of regenerating the limbs which they accidentally loſe, or are taken from them.

Cit. Lacretelle terminates this part with remarks on the ſexual difference of ſalamanders, on their organs of voice, and other peculiarities. He exhibits a methodical table of the ſalamanders of France, in French and Latin, and concludes the whole with a deſcription of the ſpecies. Theſe are, 1. *La ſalamandre terreſtre*, which is figured in the firſt plate; and of which the ſecond exhibits an accurate figure of the ſkeleton. 2. *La ſalamandre marbrée*. 3. *La ſalamandre cretée*, i. e. the creſted ſalamander. Theſe two ſpecies are repreſented on the third plate; and the fourth exhibits the female of the creſted ſalamander with opened belly, to ſhow the ſituation of the inteſtines. 4. *La ſalamandre abdominale*, engraved in plate 5, fig. 4, on which likewiſe two young ones, in their different ſtate, are repreſented. 5. *La ſalamandre ceinturée*, with a girdle, figured plate 5, fig. 5. 6. *La ſalamandre ponctuée*, or the dotted ſalamander, of which male and female are figured plate 6, fig. 6. A. and fig. 6. B. 7. *La ſalamandre palmipéde*, en-

graved plate 6, fig. 7. and a variety of it with its feet more palmipede, fig. 7, B.

Prof. Reich's Theory and Practice of Fever.

[Continued from Vol. IV. pp. 556—563.]

" Since that time," Mr. Reich proceeds, " I became more acquainted with the great uſe of mineral acids, and employed them in more or leſs quantity in all caſes of fever, whatever appellation they may have, acute, remittent, ſimple, complicated, idiopathic or ſympathic, ſymptomatic or original, acceſſory, inflammatory, putrid, pituitous, bilious, exanthematous, nervous, lanteſcent, epidemic, contagious, &c. I was convinced that they alone are capable of curing every fever, in the ſhorteſt ſpace of time which can naturally be imagined, and of removing all danger, when no organic leſion exiſts in any part of the body, and no error is committed either by the phyſician, or the patient and thoſe who attend him.

" Having for a long time only uſed the ſulphuric acid, and often experienced that the patients did not reliſh it, nor that it acted ſpeedily enough, on account of its not poſſeſſing that degree of volatility to emit the oxygen quick enough, and of its cauſing ſome inconveniencies to the ſtomach, I made the experiment of giving the muriatic acid internally, in the ſame quantity, and even in larger doſes, being more volatile than other acids; and as it proved, in all caſes, as uſeful as could be wiſhed, I preferred it to ſulphuric acid, both of which are the principal arcana the diſcovery of which I thought ſo intereſting to humanity. It is however to be wondered, how particularly the muriatic acid could have been ſo long neglected, as the extent, and the abſolute neceſſity of its uſe, in its combination with natron as common ſalt, ſhould have long ago engaged the attention of medical men; and it is from the above experiments, and theſe theoretical arguments, that I am induced to allow, with reſpect to medicinal quality, the preference to the muriatic acid; and though it has not yet been decompoſed by a chemical proceſs, it is, however, a matter of the higheſt probability, that this is effected in the organic body, as neither the ſalt itſelf, nor the muriatic acid, is excerned from it in ſubſtance, after being internally taken.

" Beſide the ſulphuric and muriatic acids, which, with reſpect to their intenſive ſtrength, ſurpaſs the reſt, I have alſo made uſe of other acids for the ſake of putting my principles to a fair trial, and it is with ſatisfaction that I found them in this way confirmed. The nitric acid proved frequently very uſeful to me in dyſenteries and chronical painful diarrhœas; I do however but ſeldom employ it now, becauſe, beſides its being much inferior to muriatic acid in point of volatility, it is imperfectly decompoſed in the body, and only a part of oxygen diſengaged from it, whereas the greateſt portion remains in the body, combined with oxygen in form of nitrous acid, which merely differs in degree from that matter, which,

which, according to the ingenious theory of Prof. Mitchill, ought to be eſteemed the frequent ſource of the moſt dangerous epidemick diſeaſes. I obſerved likewiſe, that conſiderable ſwellings often enſued the application of it. The phoſphoric acid, which I have alſo ſometimes uſed, did never effectually operate in urgent caſes; and as it is the moſt fixed of all, little effect can in general be expected from it.

" The ſuper-oxygenated muriatic acid, however, is one of the moſt efficacious, agreeable, and cheapeſt remedies, from the internal uſe of which, I have frequent inſtances of the beſt ſucceſs, particularly when oxygen was required to be brought quickly to the organs, as in caſes of lethargy, &c. though it is by far inferior to ſimple muriatic acid, which contains a greater intenſive proportion of oxygen than this. The vegetable acids have but little effect, becauſe they contain a great quantity of hydrogen and carbon in their mixture, but they may however prove of ſome avail in ſlight febrile affections.

" The beſt way of adminiſtering all theſe acids, is to bring them immediately into the organs of digeſtion; and the chief place of their action is the ſtomach. They may, however, be applied with ſucceſs in clyſters, and likewiſe externally on the ſkin, in baths or fomentations, in both which caſes they ought alſo to be ſufficiently diluted.

" But the following objection may be raiſed againſt the uſe of acids, according to the above theory, viz. that fevers are removed without any application of acids, by quite different remedies, and that conſequently their uſe is not ſo abſolutely neceſſary as is here aſſerted, and that the whole conſtruction of the above principles is therefore deſtroyed. To this I anſwer in reply, that the known febrifuge remedies are either ſubſtances compound of mineral bodies and acids, or vegetable ſubſtances, that Nature has provided with more or leſs oxygen, in a free or bound ſtate, which are decompoſed into their elementary particles by the chemical and galvanic laws of the body. It may now be eaſily conceived, how mineral bodies act againſt fevers, and likewiſe vegetables that are endowed with free oxygen or acid; but how vegetable ſubſtances not containing any acid, are capable of repreſſing a fever, is ſtill a matter of inquiry and diſcuſſion. It ought however to be advanced here, that acid and oxygen are two things utterly different from each other, the firſt being a compound, combuſtible ſubſtance; the latter ſimple, uncombuſtible, and not to be repreſented by itſelf, whoſe exiſtence can only be conjectured, but not perceived by our ſenſes. As the life of the human organic body continues only by the mutual action of oppoſite principles, of which oxygen acts as the negative power, it is alſo probable, that this principle is according to the inconteſtible laws of Nature, neceſſarily requiſite for vegetable organiſm, and conſequently contained in every vegetable ſubſtance in greater or leſs proportion. Thus, for inſtance, the *bark* is, according to the reſearches of Mr. Fourcroy, provided with a very conſiderable portion of oxy-

gen, which alſo, after my experiments, is found in the different indigenous barks and woods that have been propoſed as ſubſtitutes for it. Aromatic plants, reſins, eſſential oils, ſpirits, ethers, and the camphor, contain a great deal of oxygen; and opium even poſſeſſes much of it. The ſtate and degree of oxydation in vegetables remain ſtill to be aſcertained by further reſearches, but whether this may be performed through the medium of a retort, is very much to be queſtioned. It is probable, that if thoſe remedies do not operate in the body, by immediately imparting oxygen to it, they either combine themſelves there according to the laws of affinity with thoſe ſubſtances, by which the oxygen was bound in it, which is in this way diſengaged and left to operate, or they produce an alteration in the ſyſtem, by which the ſame thing is effected. Thus may the action of the excitant remedies be explained, which are frequently of ſuch great avail in the laſt periods of fevers. But as it is in the power of Art to reſtore the want of oxygen by remedies that immediately operate, it ſeems more proper rather to employ them, than to have recourſe to thoſe that only have a mediate effect.

" It may in ſome caſes however be adviſable, for the ſake of raiſing and multiplying the affinity, to give alternately, or at the ſame time, the mediately operating remedies with thoſe that act immediately; but theſe caſes ſhall be in future more ſpecially determined. That emetics, purgatives, and clyſters, have ſometimes a very good effect in fevers, by evacuating at once the matters, from which a new ſtimulus febrilis is always evolving itſelf, can likewiſe not be denied. Baths alſo, and fomentations, contribute a great deal to the cure of fevers, by reducing or diminiſhing the warmth according to their temperature with reſpect to the body; but it has been above mentioned, how much their effect is heightened by the addition of acids.

" The quantity of acids internally requiſite for the cure of a fever, cannot be well aſcertained, and merely depends on the ſucceſs; but intelligent phyſicians will be able to adminiſter them in ſuch a manner, that the expected effect, the cure of fever, is obtained without injuring any organ neceſſary for life.

" It has been laid down as a general rule in curing diſeaſes, always to adjuſt the doſe of any remedy according to the different circumſtances; that is to ſay, according to the previous degree of fermentation. The above mineral acids ought therefore to be adminiſtered, in beginning and increaſing fevers, in a moderate doſe, often repeated, viz. from one drachm to half an ounce in eight ounces of water, and ſome ounces of any ſyrup; or if indicated, mixed with any ſpirituous ſtimulating ſubſtance; to be taken every hour or every two hours, from one to two table-ſpoons full, or half a coffee cup, to which doſe water muſt be mixed, or drank ſoon after. In time of danger, however, and in the period of criſis, one to two drachms, (40, 50, 60, to 100 drops) may be given at once, and repeated if thought proper. The ſulphuric acid being ſtronger than the muriatic and nitric acid, leſs is required

quired of it than of theſe; the ſuper-oxygenated muriatic acid however, may be adminiſtered in large quantities, from one to two ounces every half hour or every hour. I have myſelf taken, in the courſe of four hours, a whole quart of it, and ſeveral of my patients took in the ſame time twelve or more ounces, without experiencing any other ſymptom than three or four watery ſtools.

" Although the intenſive ſtrength of any of thoſe acids is not to be much attended to, as every thing depends on the event alone, and if 40 or 50 drops do not produce the expected effect, the doſe ought to be increaſed or oftener repeated, yet it facilitates the whole proceeding, when acids of equal ſtrength are always employed. How long the acids muſt be continued is only determined by different circumſtances; and while in ſome caſes 100 drops are ſufficient, others may perhaps require 800 drops. And the more the fever approaches to the higheſt degree of fermentation, the leſs is wanted for its termination and cure

" Several inconveniencies accompany the uſe of mineral acids, which frequently oppoſe unſurmountable difficulties to the phyſician. The very diſagreeable taſte of acids can only be ſomewhat remedied by ſufficiently diluting and ſweetening them with juices that are pleaſant to the taſte. The ſoreneſs of the lips and of the internal ſurface of the mouth, ſometimes obſerved, may generally be thought to be occaſioned by not having taken ſufficient care to involve and dilute them; but moſt frequently it originates in the vehemence and malignity of the fever itſelf, that brings on a particular diſpoſition to ſuch excoriations. There is nothing to fear for the ſtomach on that account, when they are given with proper care; and they are indeed not more detrimental to the ſtomach than pepper, horſe-radiſh, muſtard, &c. which ſubſtances, though cauſing bliſters on the external ſurface of the body, are taken without any harm internally. The diſagreeable ſenſation of the teeth, which is attended with the frequent uſe of acids, is of no great conſequence, and diſappears on the diſcontinuance of them.

The ſymptoms of a favourable event from the uſe of acids in fevers, differ according to the different kinds of thoſe affections. Eructations, and even vomition, at the time of deglutition, gurgling of the bowels, diſcharge of wind, diarrhœas, riſing and ſinking of the pulſe, change of heat and froſt, ſweats, ſalivation, increaſed ſecretion of urine, reſt and ſleep, &c. are generally the ſymptoms from which, in urgent caſes, good ſucceſs may be hoped. The moſt favourable ſymptom however is, when the ſenſeleſs patient awakes from his ſtupor, and recovers his ſenſes, or falls into a ſound ſleep, in which the pulſe becomes ſlower, more regular, and moderately full.

" Deadly ſymptoms generally were, according to my obſervations, when purple ſpots appeared in the face, when one eye was half opened while the other was ſhut in a paralytic manner; when the cornea became again opaque, after it had been previouſly rendered clear by the uſe of thoſe remedies; when the patient falls back into ſenſeleſſneſs, attended with a facies hippocratica; when a rattling

a rattling in the throat is perceived, and the pulse becomes intermittent and irregular.

" After having removed all danger, and banished the fever by the acids, it is not absolutely necessary to employ other medicines, and I have, except in few cases, given no other remedies, but left the entire recovery to Nature, assisted by a good and nourishing diet."

These are the chief principles of Dr. Reich's peculiar system of fevers, which, as he pretends, will enable every practitioner to cure every kind of fever, under whatever name they may be recorded in the annals of medicine. He promises to give a more copious and full explanation of them in a particular work, which will shortly appear. However conscious of the imperfections that may be still imputed to his system, he does not dread the trial of his principles, as he esteems them to be particularly calculated for uniting all parties and all symptoms. Nobody, he thinks, whose conceptions of a chemical process are not limited by gross and vulgar ideas, will ever imagine, that by generally adopting the principles laid down here, the times of Sylvius are likely to return; but fully persuaded of the necessity of raising the art of healing to that point of view, he should feel the utmost satisfaction, if the path were pursued he had attempted to tread.

Professor Reich proceeds now to point out the advantages which he pretends to result from his discovery for medicine, as well as for the community; and we shall relate them, but without entering into their special explanation, as he mostly appeals to his previous theoretical arguments. These advantages are the following:—

" 1. The medical science will thereby obtain a surer and firmer basis, upon which a more accomplished system may in future be constructed, by farther observation than we have hitherto had.

" 2. All febrile diseases, without exception, will be contemplated from a better point of view, and, of course, more speedily and successfully removed; and every practitioner will be enabled, upon more rational grounds and principles, to dispel all danger during a few hours, in cases where no particular complication exists, nor the organs, necessary for life, are too much hurt: Farther, by that method of cure, a shorter duration of those diseases will be occasioned, the most generally bad and detrimental symptoms prevented, and strength of the body in the easiest and quickest way restored.

" 3. Certain diseases, which have hitherto been thought to be incurable, or very dangerous, and only in some cases cured by empiric remedies, will, according to those principles, be better understood and more successfully treated." The author means by them the hydrophobia, the plague, yellow fever, and pulmonary consumptions; and though he has not had an opportunity of treating the three first diseases, he is convinced, by rational arguments and his success in other fevers, that acids, particularly when given in the first periods of those diseases, will have the most successful effects. With respect to consumptions, he asserts that he has saved

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the life of many conſumptive people, or, at leaſt, conſiderably relieved them; and on that account, he recommends to his patients an acid diet, and orders them to drink fluids mixed with muriatic or ſulphuric acid, and ſpiritus vini; in which way their ſtrength and health were entirely reſtored, as far as the ſtate of the lungs would admit of.

" 4. Epidemic, putrid, or nervous fevers, diſeaſes of camps and hoſpitals, by which thouſands are deſtroyed, will in future be cured with ſecurity and leſs difficulty, and at the ſame time in the cheapeſt and moſt ſimple way.

" 5. By the diſcovery of thoſe remedies, and that new method of cure, field phyſicians will be enabled to prevent the riſe and progreſs of ſuch diſeaſes, as far as this lies in the power of man." He recommends, therefore, to allow each ſoldier, on any long and wearifome march, a certain portion of elixir acidum Halleri.

" 6. The mortality of the moſt deſtructive epidemic diſeaſes of children, as meaſles, ſcarlet fevers, ſmall-pox, hooping cough, &c. will be more ſecurely and eaſily prevented than has hitherto been the caſe;" and, conſequently,

" 7. The great mortality of children will be greatly diminiſhed by adopting thoſe principles: The mortality of children in the infantile age, originates in the falſe ideas on the cauſe of the diſeaſes to which they are expoſed, as they are generally aſcribed to an acrimony in the ſtomach, againſt which, alkaline and abſorbent remedies were employed; but the little good they did, conſiſted in the carbonic acid that was, through their medium, brought into the body. The mineral acids, however, prove, according to Mr. Reich, of the greateſt avail in all the different affections of the infantile age, difficult dentition, diarrhœas, convulſions, &c. The general preſcription is, to mix with two ounces of any ſyrup and the ſame quantity of water, half a drachm to two drachms of ſpiritus vitrioli, or muriatic acid; half a drachm of liquor anodynus, or ſpiritus vini rectificatus, of which mixture, every hour, or every two hours, one or two table ſpoonfuls are to be taken; when the diſeaſes are attended with much pain, ſome laudanum, or tincture of opium may be added.

" 8. The treatment of ſeveral non-febrile diſeaſes will, by that method, be conſiderably and ſucceſsfully reformed.

" 9. The remedies by which the cure is performed, are very cheap, and, at the ſame time, fevers are cured in a ſhorter period with leſs expence, whereby conſiderable ſums will be ſaved, that are exported for foreign drugs."

Such is the Theory of Dr. Reich, and the method of cure which is grounded upon it. Although we may not deny that it agrees with the new diſcoveries in chemiſtry and natural philoſophy, yet, it muſt ſtand the teſt of experience and obſervation before it is likely to meet with general approbation. Of twenty-eight patients who were treated by Dr. Reich in the Charité Hoſpital, under the ſuperintendance of the Committee, three died, but the reſt were cured. In private practice the remedies were uſed with different

ferent ſucceſs, and ſome obſtinate quartans and tertians were removed by them; while, in other caſes, they proved of little or no avail.

We ſhall not omit communicating to our readers the further tranſactions relating to this theory, which are likely to be publiſhed by different phyſicians.

An Eſſay on the Malignant Peſtilential Fever, introduced into the West Indian Islands from Boullam, on the Coaſt of Guinea, as it appeared in 1793, 1794, 1795, *and* 1796. *Interſperſed with Obſervations and Facts, tending to prove that the Epidemic exiſting at Philadelphia, New York, &c. was the ſame Fever introduced by Infection imported from the Weſt India Iſlands. And illuſtrated by Extracts founded on the State of thoſe Iſlands, and the Information of the moſt eminent Practitioners reſiding on them.* By C. CHISHOLM, M. D. and Inſpector General of the Ordnance Medical Department in the Weſt Indies. Two vols. 8vo. about 1000 pages. London. Mawman. Price 16s. boards.

THE Author, in his Preface to this ſecond Edition, ſays, "I have exhibited the motives which induced me to preſent the public with a ſtatement of my opinion reſpecting the nature, and of my reaſons for adopting a new mode of treatment of the Malignant Peſtilential Fever. Any further addreſs might ſeem unneceſſary, and would, in truth, become ſo, had not much, and in ſome inſtances illiberal, controverſy taken place, tending to ſubvert that opinion, and to diſcredit that treatment. How far the authority, on which reſts the vehement oppoſition of theſe controvertiſts, may be relied on, is certainly an object of importance: but as no facts ſupport them—as no local knowledge or information appear to have been acquired—and as their aſſertions ſeem to be founded on the baſeleſs fabric of theory, and the generally received but falſe idea of the incompatibility of a heated and rarified atmoſphere to retain infection—it muſt neceſſarily remain with me as viſionary, or, at beſt, equivocal. And I am the more inclined to conſider this oppoſition in a light which reflects little credit or reſpect on the authors of it, becauſe the reſult of my own obſervation, and of the enquiries which I have induſtriouſly made, during my later reſidence in the Weſt Indies, has only ſerved to confirm me more ſtrongly in the truth of what I have already offered on the ſubject. But, as the public poſſeſs a right to more than ſimple aſſertion on my part, I have judged it proper to intrude myſelf once more on their attention, and to offer my ſentiments in a form more diffuſed, and more capable of fixing the mind, than that of the firſt Edition of my Eſſay on the Malignant Peſtilential Fever.

"In the execution of this deſign, I have thrown the following work into four parts. The firſt contains an account of the origin, progreſs, diagnoſtic, cauſe, and other circumſtances of the pathology of the diſeaſe; each of which is treated of in a diſtinct chapter. The ſecond relates the means of cure, in five chapters; the three firſt are appropriated to the diſcuſſion of the three general indications

dications of cure, the result of the consideration of the circumstances peculiar to the disease. The fourth is employed in the discussion of the principles on which the efficacy of mercury in fevers of hot climates in general, and more especially in the Malignant Pestilential and Yellow Remittent Fevers, is founded. And the fifth is confined to such observations on the action of oxygenated medicines on the system, deranged by fever and other morbid affections, in hot climates, as have occurred in a very extensive use of them. For this, which, on a general view, seems to have little connexion with the subject of the Essay, little apology perhaps is necessary; and the late discoveries relative to the share which the gaseous fluids have in almost all curative intentions, may preclude the necessity for any. The third part is altogether allotted to the important investigation of the means of prevention. In the course of this enquiry a question of infinite consequence is started, and an attempt made to display the means by which the purpose of it may be fulfilled; I mean how far the European constitution may be prepared for the process of assimilation to the tropical climates?

"Having thus considered the great outlines of those divisions of the following work which relate to the pathology, the cure, and the prevention of the Malignant Pestilential Fever, I shall proceed to account for the publication of the fourth part.

"The opposition which I have had, and have to contend with, in my endeavour to impress the truth of my sentiments on the public mind, relative to the origin and cause of the propagation of the pestilential infection, which has characterised the late direful epidemic; and to the mode of treatment which I, as well as every unprejudiced practitioner in the West India Islands, have found the only successful one, has proceeded from the agents of the Bulama Association in the first instance, and from the Medical Staff of the Armies acting in the West Indies subsequent to the year 1795. The attempts at refutation of the strong facts which have occurred at Grenada, by the agents of the Bulama Association, are similar to the assertions made by the writers for the Levant Company, against the importation of infection into Great Britain immediately from Turkey. The first have imagined that their colonies on the coast of Africa might be injured; and the latter had fears of their trade suffering: we see therefore in both, interest overleaping every obstacle, and shutting the door against truth. The conduct of the gentlemen composing the medical staff cannot be so obviously accounted for Was it necessary to exhibit causes for the wide devastation which took place in the military hospitals, we might expect a delineation of facts tending to prove that this proceeded from the faithful observation of the method recommended by me; but what shall we say, when we are told that the efficacy, and even danger, of this method, were inculcated at the commencement of the operations of the armies, and before cases occurred on which trials might be made. It is not my intention to enter on the invidious task of displaying the real causes of the loss of 13,437 soldiers, our countrymen, in a period little exceeding thirty months, by the Ma-

lignant Pestilential and Yellow Remittent Fever; but I may, without incurring censure, ask, why the mercurial treatment was not recurred to, when that adopted had so generally failed? No satisfaction will arise from being told, that much of the dreadful mortality which took place proceeded from the latter of these diseases; for the applicability of the question to the nature of the event is not diminished. I should not, however, consider it as necessary to state the general circumstances of the medical conduct of the Hospitals, did not the accumulations of death from 1796 to 1798, present an argument to the uninformed, against the utility and propriety of the mercurial treatment of the fatal maladies in question. To such the evidences which the fourth part comprises may be useful; for my own justification I consider them as necessary. A vain and absurd attempt was indeed made in the year 1797, to shew that the exhibition of mercury, in the fatal epidemics which prevailed during that and the preceding year, had been generally recurred to; and that the general result was far from favourable; but the reports on which this belief was founded, were of such a nature as discredited the position which they were intended to establish; for it is universally known, that the mercurial treatment was industriously condemned by those placed in the direction of the hospitals; and a youthful, inexperienced, and docile staff readily trusted, where attention, application, and a denial of accustomed indulgence, would have been the price of success. Were there a possibility of inaccuracy in this statement, I would rejoice in suppressing it. I am perfectly open to conviction, and feel no enmity to any individual of the staff; but justice to myself, and humanity, shuddering at the destruction of nearly the whole of the West India army, call upon me to declare that there is undoubted authority for stating, that notwithstanding the total inefficacy of the remedies generally employed in the general hospitals, the practice described by me was not recurred to by more than three army physicians in a fair and judicious manner. Two of these gentlemen are unhappily no more; but Dr. Wright is a living monument of the advantages which result from the employment of mercury, conducted by professional skill, and by judgment. This gentleman's report has been made public, and the world unites in the eulogium of the author,

"The absurd conduct of the Medical Board at home, at the time Sir Ralph Abercromby's army was formed, is chiefly reprehensible; and may indeed, very justly, be considered as an extenuation of the inexperience, the folly, or the crime, of the younger members of the medical staff of that army. In the name of common sense, let me ask, what useful purposes could arise from a regulation which precluded all from exercising the important functions of an army physician, but such as derived their medical knowledge from seminaries where none can be obtained; or such as were, or became licentiates of the London College of Physicians? What had an Oxford or a Cambridge degree; what had a licence to practise within seven miles of London, to do with medical

cal practice within the tropics? Can the whole of that learned body united, communicate that experience in the treatment of inter-tropical fevers, which can be acquired only by a long and painful attention to them in the torrid regions where they are endemic? This singular infatuation, by which the order of things was inverted, proceeded from views best known to the triumvirate themselves; but its effects may be considered as the remote cause of all the misfortunes which befel the devoted troops composing the army under the command of Sir Ralph Abercromby. Our country, therefore, have inexpugnable reasons for consigning a Boa d, whose resolves and regulations militate so forcibly against the sober dictates of common sense, and whose self-sufficiency has given existence to a cloud which obscures the most manifest proofs of the baleful tendency of their measures, to the fate of the unhappy victims who have fallen under the operation of both.

" The fourth part of the following work is intended to constitute, therefore, a body of evidence, to shew the fallacy of the statements and reasoning of the Agents of the Bulama Association; and to exhibit the disingenuous conduct of the medical staff, and the fatal consequences of a disbelief of the efficacy of a remedy which had been established by the experience of a multitude of eminent practitioners in all the West India Islands, where the calamity it was calculated to correct, existed. In treating this part of my subject, the views of the actual state of each colony, I have given, may be considered as too diffuse, and unnecessarily minute; but I have found the matter which presented itself, important; and the shades of variation are too considerable to remain unexamined in the investigation of morbid causes. Those objects which are common to all, have been sufficiently explored in the Introduction to the first Edition, which I have therefore given a place in this.

" Dr. Trotter, of the Navy, has thrown out Remarks, the tendency of which is, to invalidate the authority on which I found my opinion relative to the origin, the nature, and the treatment of the Malignant Pestilential Fever. It would be with no uncommon concern I should enter the lists of controversy with a gentleman whose liberality of thinking, professional skill, and exertions in the cause of suffering humanity, have placed high in the estimation of the public; and I trust that a more attentive consideration of the facts and reasoning I have submitted to the public in the following work, will remove that inclination to differ from me, which is only too apparent in several passages of his excellent work, The Medicina Nautica."

Further Information respecting the Case of Mrs. Craib, formerly announced as cured of a Cancer in both Breasts by Dr. Nisbet. With additional Cases. Communicated by Mr. OLIPHANT.

To the EDITORS of the MEDICAL and PHYSICAL JOURNAL.

Gentlemen,

IN the last Number of your Journal, there appears a "Reply to Mr. Oliphant's Account of Mrs. Craib's Case of Cancer," wherein it is stated, that my Communication was "clearly meant to imply a reflection on the former relation;" whereas my motive, I solemnly declare, was what I thought due to myself and the public on this occasion, viz. solely to give a faithful detail of the case of Mrs. Craib; which I did, and sincerely console myself in so doing, for reasons hereafter mentioned.

I cannot help observing, in order to lessen the dependance on my authenticity, and to draw aside the public's notice from my report of the case, so essentially different from his, that much ingenuity has been employed by Dr. Nisbet to serve his purpose; this, with those who know me, will weigh nothing; and will weigh just as much with others when they are acquainted with the sequel.

The gentlemen advertised in his first communication had very little to do with the detail of Mrs. Craib's case; therefore I considered particular notice was irrelevant in my report; only two prescribed, the rest merely looked at it; they did not all give an opinion: yet an effort has been made to degrade their professional abilities before the public, under his specious pretence, merely to give them "an opportunity of proving the authenticity of the statement;" which, I believe, they did not give themselves the trouble to do; whereas, in fact, it was to enrich his own triumph and influence in the public opinion. When there were collected together, by private invitation, several other gentlemen of the profession, to dandle this abortive unique, surely the like gentle mode might have been extended to the other respectable surgeons, if a simple opportunity had been alone in contemplation: No, it could not here be so intended, though

"Inter se convenit ursis."

My intention being a detail of facts, not controversy about imaginary points, however wished for, in the relative description of diseased appearances, the most essential difference will be

be ſeen: No reverted edges, no pouring out of quantities of blood; no rheumatic or erratic pains, except a few hours of pain from very hard labour; no violent pain in the breaſt, or large ulcer, ever happened: there were ſome alarming chronic inflammations in the miliary glands of the ſkin, and a red ſublivid hue of the whole breaſt; the laſt was the conſequence of accident and empirical treatment.

I did not object to the frictions, in the firſt inſtance: Being reſponſible for a ſafe conduct of treatment, when my patient was liſtleſs and greatly reduced, with loſs of appetite, and a ſore mouth, in extremely hot weather, not favourable to the regaining of loſt ſtrength, by her ſolicitation, and my own opinion, I deſired that the ſevere diſcipline might be laid aſide. There was no ſhrinking of the breaſt perceptible, but what was in common to the reſt of the body, except as far as aroſe from an extenſion of the ulcerations, till after the pleuritic attack.

The reſolution of the upper and larger part of the diſeaſed breaſt into matter, was often ſaid to be at hand, and in an actual ſtate of ſuppuration, though it never happened; though felt, it was never ſeen.

Of the primary cauſe of abſorption of the breaſt, and the altered condition of the ulcerations, I have given an opinion in my ſtatement; wherein I neither took the merit of a cure to myſelf, nor allowed it to the Doctor: though I admitted the breaſt was abſorbed, and the ulcers healed, yet a conſtitutional diſeaſed irritation ſubſiſted from this abſorption.

If it is meant, by the "impropriety of the application," (pronounced, I am ſure, by no oracle in phyſic,) that my treatment of the patient in the latter week of October was improper, when I conſidered it uſeleſs to conſult him, I muſt ſay, (by the violent interpoſition of Dr. Niſbet, who, unſolicited, called in another phyſician to give weight, and carry the patient by a coup de main,) a decoction of Auguſtura bark, with vitriolic acid, was preſcribed by him; and though the practice was irregular, I made up this medicine, having alone a wiſh to benefit the patient, and to convince her that ſhe ſhould have all the aſſiſtance ſuggeſted for relief: I gave her, however, my opinion, on adminiſtering the firſt doſe. By this treatment a ſtop was put to the plentiful glary expectoration; a moſt teaſing cough came on; tightneſs and oppreſſion acroſs the cheſt, with ſhort breath; ſo that I had the greateſt difficulty to perſuade her to repeat the doſe, and only on the aſſurance that ſhe ſhould have a large delaxant portion of ipecacuanha, with opium, and ſome volatile alkali, to provide againſt ſerious conſequences, ſhould they enſue; a ſecond portion was given, but might have proved fatal, (according to the account of her friends

friends who attended, and Mrs. Craib herſelf, the following morning,) if ſhe had not taken the provided medicine. Though the Doctor ſuppoſed he had cured the cancer, he puſhed further here in the province of medicine.

Did I treat my caſes "with bark and carbonic acid?" Has Dr. Niſbet compiled ſo much, and yet in a trifling ſtatement is capable of making ſuch a miſtake? This error is of itſelf ſuſpicious. However, I ſhould not be ſurpriſed to find the greateſt enemy to bark in detail, employ it in practice, and without reſtriction: ſuch to me ſeems to be the caſe with opium.

I muſt take notice alſo, that the reflector on Mrs. Oſborn's caſe has paid leſs attention to the circumſtances of it, than to his own reveries: the ſkin was puckered before inflammation, ſuppuration, or ſloughing; but after ſloughing, the reſerved ſkin extended ſmoothly over the formerly ulcerated ſurface, not healing as a ſcroſulous ſore, the appearance of which every tyro, nay, every old woman is acquainted with.

As to his making a compariſon between the influence of ſudden inanition and ſtarvation, in removing morbid accumulation by abſorption, it is only an interlude.

It is true, Dr. Niſbet aſked me, if I had any objection to his giving Mrs. Craib's caſe to ſome periodical publication; and I ſaid, none. When he had written it, he waited on me in his way to the receiver of communications, and read it over. To the beſt of my recollection nothing particularly paſſed, except at our parting from my houſe, wherein I told him, his account, with regard to my opinion given to Mrs. Craib, when I firſt ſaw her, was not true; and a proof of this he could have from herſelf. My opinion was, that I gave her hopes of a ſloughing of the whole diſeaſed breaſt, not "by abſorption," as was afterwards inſerted; and alſo an improbability of any of it being reſtored to health. Before he read me his account, as in the other reports of opinions, it was repreſented, in the moſt unqualified pronunciation, to be incurable, and that he of himſelf had performed a perfect cure. Whether he would have made any alteration from what I ſaid, I knew not: indeed, it was of no conſequence.

Mr. Coe, Mrs. Craib's friend, and Dr. Nisbet's operator, a worthy man, though in a humble ſtation of life, called upon me the ſame evening; and it was mentioned to him what his acquaintance Dr. Niſbet intended; the manner and precipitancy of which I diſapproved of. He ſaid he would go to the Doctor, as it ſtruck him in the ſame way; and would talk to him about it. He called again, and told me the Doctor replied, "he would ſtop its publication."

What

What right has any one to judge of another profeſſional man's ſentiments, who had not himſelf purſued "the candid line of conduct," and had broken off all communion by his empirical conduct, and reduced himſelf below the level of a regular practitioner?

With regard to joint names, was it likely I would make myſelf reſponſible for any thing Dr. Niſbet might have choſen to inſert? for, in fact, I had not even the reading of it; yet I was to bear its fate for the Doctor's ſake. This is a ſac ſimile to his declaring, in a note to Dr. Bradley, that leave was given, by gentlemen who had ſeen the caſe, to atteſt the cure by the uſe of their names: whereas, in truth, Mr. BLAIR, one of them, did afterwards publiſh a gentle rebuke and refutation of ſuch a tender on his part.*

As far as hitherto concerns our ſtatement of Mrs. Craib's caſe to the public, the patient herſelf had read both; and was aſked, in Mr. BLAIR's preſence, her opinion with regard to their juſtneſs: Her anſwer was, "If ſhe had not been told Dr. Niſbet's ſtatement was that of her diſorder, ſhe could not have thought it; but that, as far as ſhe could judge, or knew, Mr. Oliphant's account was juſt."

My ſtatement in the London Medical Review and Magazine for December, ſo far from advancing that I had cured the patient, according to Dr. Niſbet's attack, will be found to contain theſe words: "However, ſubſiſting ſtill is a *ſcirrhus* in the right breaſt, which ſeems to enlarge with her repletion; and there is not the leaſt doubt of morbid irritation exiſting in her habit, moſt likely the offspring of her abſorbed diſeaſed breaſts, or that diſpoſition which produces ſcirrhus."

I am ſorry my opinion has been realized. On the 1ſt of this month ſhe ſent for me, to ſhew me a few eruptions that had come out the preceding fortnight; and with conſiderable relief to her inſide, ſhe told me. When I ſaw her, I found there were innumerable affections of the miliary glands of the ſkin of both breaſts, particularly under the abſorbed one, extending a great way on the ſide under the arm. The laſt healed ſore, where the abſorbed one was, was re-opened; on ſeveral other parts of this ſurface conſiderable ſcirrhous tubercles have ariſen. The right breaſt, from being left with a ſmall pendulous ſcirrhus, ſuſtained by the flaccid integuments; the ſkin has now contracted, which draws up the increaſed ſcirrhus; and the whole threatens to become one maſs of diſeaſe, of much more ſerious conſideration to Mrs. Craib than any

* Medical and Phyſical Journal, No. XXII. p. 569.

any former ſtate of her malady that I have witneſſed: as alſo her preſent weakneſs, indifferent appetite, bad digeſtion, a diſpoſition to anaſarca, and her pulſe upwards of 112, have diſabled the conſtitution from ſuſtaining ſuch a grievous load for any great length of time.

Leſt this farther account of my patient's caſe ſhould be called in queſtion, from ſiniſter motives, as had already happened, I requeſted Mr. Blair to ſee the ſtate of Mrs. Craib's health on the 8th inſtant; which he politely and obligingly did, and favoured me with his report of what he ſaw, as follows:

A Letter from Mr. BLAIR to Mr. OLIPHANT.

"SIR,

"As you have done me the honour to give me a ſight of Mrs. Craib's caſe, I cannot reaſonably decline writing (as you deſire) a ſhort ſtatement of what I then witneſſed.

"When I formerly ſaw the patient with Dr. Niſbet, appearances ſeemed very much in her favour, and there was even room to hope for a complete cure; but, yeſterday, I obſerved the glandular enlargement and induration of the right breaſt had increaſed, the ſkin and integuments of the left ſide were irregular, tuberculated, and adhering to the pectoral muſcle; beſides which there were various hardened ſubcutaneous glands about the left breaſt, extending towards the armpit.

"I here beg leave to conclude my evidence. If it will ſerve to throw light on the truth, you are welcome to make uſe of this letter. I remain,

"SIR,

Great Ruſſel Street, Bloomſbury, January 9, 1801.

"Your obedient humble ſervant,
"WILLIAM BLAIR."

The following two caſes, which I am afraid will be followed by ſeveral others, will further afford a reaſonable juſtification for my giving the fair ſtatement of Mrs. Craib's caſe.

In February laſt Charlotte Logan, at Mr. Campbell's, Newcaſtle Street, Strand, aged 46, had her menſtrua ſuddenly ſuppreſſed apparently by a violent emotion of the mind; and in the ſummer perceived a ſmall ſcirrhus in her left breaſt, which became painful in Auguſt following.

About September 25th ſhe was attacked with fever, ſaid by the gentleman who attended her, to be independent of the condition of the breaſt; but on the incumbent ſkin of it, and to a great extent on the left ſide, a diffuſed redneſs appeared, attended with much pain, which was removed by repeated bleedings with leeches, and left the ſcirrhus in the ſame condition as before.

From

From the alarming ſtate of the breaſt, ſhe was adviſed to go into St. Bartholomew's Hoſpital, wherein ſhe remained nearly a fortnight. After a conſultation of the ſurgeons, exciſion of the diſeaſed part was concluded on: Hearing, however, of Dr. Niſbet's cure of Mrs. Craib in the beginning of October, her friends removed her ſuddenly to be under his care, who pronounced "he would cure her, at fartheſt, in ſix weeks."

On the ſeventh week, it was ſaid that the breaſt would ſuppurate and burſt in eight days. But a few more days were paſſed; and ſuppuration did not follow.

After being nine weeks under his frictions, ſhe was taken with a violent pain in her head, when ſhe was deſired to keep her bed. For a fortnight ſhe was confined: The Doctor only ſaw her once, and never after returned, for reaſons beſt known to himſelf, having attended her eleven weeks. There was great increaſe of the pain and diſeaſe in the breaſt, and an oozing from around the nipple, forming troubleſome incruſtations.

A week after this ſhe applied to me, and I found the whole left breaſt ſcirrhous, ſeveral cuticular glands inflamed, which appeared firſt under the Doctor's care, and an incruſtation round the nipple; the whole attended with moſt excruciating pain, and vaſt agitation of mind. She now wanted me to pronounce whether it could poſſibly be cured: Not being bold enough to ſatisfy her wiſhes, ſhe was put upon a plan that was conſidered as too expenſive in the purchaſe of malt.—Though the application ſoothed the breaſt, yet I did not ſee her after, till I met her on the 1ſt inſtant at Mrs. Craib's for the ſecond time, and found ſhe had an ointment ſpread on paper: I therefore conclude ſhe is now under the direction of ſome old woman. During this interval ſeveral lymphatic glands behind the clavicle, and up the ſide of her neck, have become enlarged.

There is alſo the caſe of Mrs. ———, who put herſelf under the care of Dr. Niſbet, in conſequence of the firſt publication of Mrs. Craib's caſe; but the reſult of that can be "beſt related by the undertaker."

I have now, Gentlemen, laid before you and the public all the facts deſerving their notice reſpecting Mrs. Craib's caſe. It was very much hoped for, that perſonality might have been avoided: However, unfortunately a ſpirit has ſhewn itſelf, living and thriving on controverſy, that has dragged me into meaſures I highly diſlike, and I muſt, in future, leave to itſelf, a ſpirit which wiſhes to ſubſtitute ſophiſtry for plain facts, diſhonourable inſinuation for claim of rectitude, and ſcholaſtic reaſoning for practical opinion. I am, &c.

Percy Street, Jan. 8, 1801. ISAAC OLIPHANT.

MONTHLY REPORT of DISEASES,

Admitted under the Care of the PHYSICIANS of the FINSBURY DISPENSARY, St. John's Square, Clerkenwell.
From Dec. 20, 1800, to Jan. 20, 1801.

	No. of Cases.		No. of Cases.
Continued Fever	69	Menorrhagia	7
Small-Pox	3	Melancholia	1
Eryſipelas	5	Dyſpepſia	16
Cynanche Tonſillarum	7	Hyſteria	3
Phthiſis Pulmonalis	11	Paralyſis	4
Hæmoptyſis	4	Gaſtrodynia and Enterodynia	6
Pneumonia	2	Epilepſia	4
Cough and Dyſpnœa	57	Cephalæa	7
Catarrh	4	Dropſy	11
Dyſentery	2	Aſthenia	19
Diarrhœa	6	Infantile Diſeaſes	13
Chloroſis and Amenorrhœa	18	Chronic Eruptions	11

The caſes of typhus will appear to have very conſiderably increaſed in number during the laſt month; but they have not, in general, been characteriſed by that violence of frenzy which was ſo eſpecially remarkable in the fevers of the ſummer and autumn. The extraordinary determination to the head that prevailed during thoſe ſeaſons, in various inſtances, produced not merely the common delirium of fever, but an abſolute and a ſpeedily fatal inſanity.

The preſent typhus is more particularly marked by a profound coma, and a general proſtration of the ſtrength.

In ſeveral caſes that at firſt ſeemed to be deſperate, a recovery, it might almoſt be called a reſurrection, was brought about principally by very ſtrong ſtimuli, applied in ſmall but frequently repeated doſes. After the inſide had been *rinced* by emetics and aperients, brandy with wine was often adminiſtered in as large a quantity as the patient was ſuppoſed able to ſwallow, without the inconvenience of ſucceeding ſickneſs or intoxication.

This mode of treatment, when it was aſſiſted by the daily waſhing of the whole body with cold water, the free admiſſion of freſh air into the ſick room, the frequent change of linen and bed clothes, moderate doſes of opium at night, and the careful abſtraction of every thing that might tend to interrupt the ſleep of the patient, or to diſturb the tranquillity of his mind, has ſeldom failed to induce a ſpeedy convaleſcence, the progreſs of which towards an entire reſtoration of health and ſtrength was afterwards accelerated by the application of nouriſhing diet, and a variety of medicinal corroborants.

It ſhould, however, be underſtood, that the directions of the phyſician, thoſe eſpecially that related to the adminiſtration of wine and food, could not, in many caſes, be carried into effect, in conſequence of the poverty of the patient, and the ſlow and ſcanty aſſiſtance of parochial charity.

Too generally is it imagined that work-houſes are not provided only, but alſo are fully adequate to the relief of thoſe who labour under the extremity of want. But if any credit may be paid to the teſtimonies of many of the poor creatures that crawl to ſupplicate the medical relief of the Diſpenſary, this is far from being, in every inſtance, actually the caſe.

Not longer ſince than yeſterday, to the perſon who is now employed in writing this Report, a boy was brought, whoſe attenuated and nearly lifeleſs form awakened a ſentiment, and even an exclamation of compaſſion from all the ſurrounding patients.

According to the mother's account, whoſe appearance and manner gave not the ſlighteſt pretence for ſuſpecting the veracity of her aſſertions, her child had been for ſome time depoſited in a work-houſe, but had there been deprived of what was abſolutely eſſential not to his health merely but almoſt to the bare ſupport of his exiſtence.

By ſome the Reporter has been charged with indiſcretion, in thus unveiling the extreme wretchedneſs of the poor. But, deaf to the dictates of worldly prudence, and inſenſible to the impulſes of ſelfiſh intereſt, never, by ſuch motives, will he be tempted to decline the declaration of facts which he knows to be true, and the diſcovery of which he cannot but regard as of unſpeakable importance.*

One of the caſes of melancholia, recorded in the liſt of diſeaſes, is deſerving of attention, from the circumſtance of the patient's not having been afflicted with it until after the deprivation of his ſight. The reflection upon that loſs could not fail for a time to have been itſelf a courſe of uneaſy feelings; but the continuance of his depreſſion might perhaps be better accounted for by his not being any longer able, in conſequence of this loſs, to purſue his uſual active employment, by its withdrawing from him the natural and exhilarating ſtimulus of light, and by its precluding altogether the poſſibility of that amuſement and diverſion of mind, which in general is ſo conſtantly derived from the contemplation of external objects. By confining the ſenſibility within a ſmaller compaſs, it condenſed and increaſed its force.

A caſe occurred which the phyſician who was conſulted with regard to it, ſuſpected to be an aneuriſm of the aorta. But from a degree of diffidence with regard to the accuracy of his concluſion, he had recourſe, for a removal of his doubts, to the advice of a reſpectable ſurgeon†, who, after an attentive examination, having formed

* Since the publication of the laſt Report, a donation of twenty pounds has been preſented, by a perſon well known for his humanity toward the poor, to the phyſicians of the Finſbury, and ſeveral other Diſpenſaries in London, for the relief of thoſe of their neceſſitous patients who are confined to a ſick bed; and, to uſe the words of the gentleman through whoſe medium it was tranſmitted, "to be diſtributed in ſmall ſums proportioned to *the number of ſtarving children.*"

† If the name of the gentleman alluded to was to be mentioned, *it would not only* give an additional confirmation to the fact, but alſo would demonſtrate to the public the extreme uncommonneſs of a caſe that could have been miſtaken by a perſon of his profeſſional learning and ſagacity.

formed more decidedly the same opinion, scrupled not instantly to pronounce the sentence of speedy death upon the unfortunate patient.

Since that time, however, there has occurred strong reason to believe that the complaint was merely a nervous affection. It appears to have originated from distress of mind; it was induced often, and always was aggravated by any thing that agitated her spirits; it was accompanied by Borboriemi; all these symptoms uniformly increased or diminished together: For about ten weeks they have all been gradually disappearing; and for the last fortnight have scarcely been felt at all, in consequence, as it is reasonable to suppose, of the remembrance of the painful circumstances from which her disorder had at first originated, having, during that time, become more feeble; and also perhaps from a favourable change that, according to her own account, had lately taken place in the state of her external circumstances.

In many diseases, especially in those that are called nervous, a suspension of the symptoms has not unfrequently been found to occur in consequence of the same, or indeed any other complaint attacking one who is particularly near and interesting to the patient. Even in cases of fever, a mother seldom finds herself sick until the sickness of her child is over. The attention and anxiety which are constantly kept up, do not prevent the body from receiving contagion, but often prevent the mind from being for some time aware of its influence. No sooner, however, does the recovery of the child take place, than, in general, it is succeeded by the indisposition of the parent; which, although it has been delayed, cannot fail to be aggravated and rendered still more dangerous by the extreme degree of labour, watchfulness, and solicitude that had immediately preceded its attack.

In the remarks which, in a former part of this report, have been made with regard to the use of stimuli in cases of desperate disease, it was far from the intention of the writer to encourage a recourse to them in a state of health and vigour. The application of any extraordinary stimulus to the human system must invariably abridge the period of its possible duration; but at the moment when it is about to be extinguished, it is necessary to *blow* the flame of life, although by that means you consume a part of the fuel that is necessary to its support.

The grand object to be attended to in what is vulgarly denominated a low fever, is by artificial means to give, for a time, a degree of strength that may support the patient during *the period of his struggle with death.*

The stimulating mode of practice seems to be particularly suited to the constitution of those who live under the influence of the sedative atmosphere of the metropolis. In London it is scarcely possible for a man to receive into his lungs a draught of air that has not been in some other person's lungs before. This *second hand* air is not only always injurious to health, but sometimes proves almost immediately destructive of existence.

It is a circumstance well worthy of remark, that out of the multitude of cases that within the extent of the Finsbury district have, for this last year, been attacked by typhoid contagion, few, comparatively, have fallen victims to it, but those whose previous habits of debauchery or intemperance had reduced them into a state that was peculiarly suiceptible of disease, and almost altogether insensible to the operation of medicine. Bark has but a feeble effect upon a stomach that has been long accustomed to brandy; and a frame, the lamina of which have been destroyed by an inordinate indulgence of the sensual appetites will, in no instance, be regenerated, or even find considerable relief, from a recourse to any of the pharmaceutical preparations*.

Red-lion Square, J. R.†

Account of Diseases in an Eastern District of London, from the 20th of December, 1800, *to the 20th of January,* 1801.

	No of Cases.
ACUTE DISEASES.	
Continued Fever	18
Pneumonia	2
Sore Throat	3
Acute Rheumatism	2
Dysentery	2
CHRONIC DISEASES.	
Cough	15
Cough with Dyspnœa	19
Hydrothorax	4
Catarrh	5
Hæmoptysis	4
Gastrodynia	10
Ascites	3
Anasarca	5
Colica	2
Enterodynia	5
Hysteria	7
Vertigo	4
Hemiplegia	2
Cephalæa	8
Amenorrhœa	9
Fluor Albus	7
Hæmorrhois	3
Dysuria	2
Chronic Eruptions	12
Lumbago	2
Sciatica	2
Chronic Rheumatism	19
PUERPERAL	

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* The idea which it is here meant to inculcate, and indeed has been more than once inculcated in these reports, has seldom been enough attended to by patients, or acted upon in the practice of physicians. Upon the minds of the former its truth cannot too deeply be impressed, although from the future profits of the latter a conviction of its truth might chance to deduct no small portion of that pecuniary emolument which they have hitherto been in the habit of extracting from the mental, more perhaps than from the corporeal imbecility of their fellow creatures.

† Dr. Webb having retired from his official connection with the Finsbury Dispensary, these reports cannot any more be sanctioned by the initials of a name that long will be remembered; and as long as it is remembered, will be respected by the supporters, and ever will be dear to the memory of the patients of that charitable institution. From the friendship and society of his late amiable colleague, the writer of this article has been indebted for relief under the pressure of almost unprecedented calamity; and from his kindness and professional skill has derived important assistance in discharging the duties annexed to an anxious and most laborious situation.

PUERPERAL DISEASES.		INFANTILE DISEASES.	
Menorrhagia Lochialis -	5	Aphthæ - - - - - -	4
Low Puerperal Fever - -	4	Convulsio - - - - - -	3
Rhagas Papillæ - - - -	3	Diarrhœa - - - - - -	8
		Dentition - - - - - -	2

We are sorry to announce the continuance of a disease, which we have in several former Reports, either particularly described, or incidentally referred to, as the reigning epidemic: A continued fever of the typhoid character, and attended with unusually severe affections of the head, still prevails very generally.

The delirium which commonly attends fevers of this class, is rather a confusion of ideas and an interrupted recollection, attended with low mutterings and expressions of anxiety, than any discovery of rage and violence; but in many of the cases now referred to, there has been an active and furious delirium, which has rendered coercive means necessary to keep the patient in bed, or prevent him from doing mischief. The disease has in some instances approached in a very insidious manner, and before the state of the pulse and other symptoms have created any alarm, either coma or delirium have occurred, and excited apprehensions for the safety of the patient; and in too many instances the disease has proved fatal.

In a late report, we had occasion to remark that the Small-pox proved uncommonly fatal; and by a comparison of the lists now referred to, it will appear that the number of deaths by this disease during the last year, is in the proportion of two to one of the preceding year. The number of deaths by Fever, in the same period, has also increased by more than one-third. *

* *The General Bill, containing the Diseases and Casualties of the year* 1800, *is unavoidably postponed till our next.*

MISCELLANEOUS INTELLIGENCE.

Cit. Vaquelin has discovered in *the common house leek (Sempervivum tectorum L.)* a great quantity of malat of lime (malate de chaux) even in a greater proportion than it is met with in any fruit. It may be extracted in two different ways; the one by evaporating the juice, and pouring alkohol on the residuum to free it from the saccharine parts. After being sufficiently washed, it is treated with half its weight of sulphuric acid, mixed with seven or eight parts of water But as by this method, a portion of sulphat of lime is left in the malic acid, the following seems to be preferable. A solution of acetite of lead is poured upon the juice of the sempervivum; and after having edulcorated the precipitate, it is decomposed by diluted sulphuric acid. In the same way the purest malic acid

acid may be obtained, which is but very little impregnated with colouring particles. The ſame plant contains likewiſe a conſiderable portion of ſaccharine matter, and affords alſo a ſort of brandy: And after having ſeparated the malat of lime, a ſyrup may be got by evaporation, much reſembling that of apples. The root gives alſo a great portion of malat of lime. This is the only plant in which it has been found. Hitherto it has been only extracted from ſome fruits, nuts, berries, &c. It is very probable that malic acid is contained in the ſame ſtate in all ſucculent plants, and particularly in the genus of *Sedum*. *(Annales de Chemie*, 101.*)*

According to the reſearches of the ſame chemiſt, *the vitrum antimonii*, or glaſs of antimony, contains in 100 parts, 12 parts, or more frequently 9 or 10 parts of *ſiliceous earth*. It is probable, that it originates from the crucibles in which the oxyd of antimony is melted on the ſiliceous earth, on which this oxyd has, like that of lead, a great action. It is eaſily conceived, that its proportion muſt vary according to the degree of heat that is employed, and the time it is kept melting. It is likewiſe poſſible, that this earth comes from the furnace in which the ſulphur of antimony is calcined. This circumſtance, undoubtedly, accounts for the inconſtant effects of emetic tartar, which is always produced, if the ſiliceous earth is not ſeparated by repeated cryſtallizations, or if the ſolution is merely evaporated, a practice ſtill very common amongſt apothecaries. Many perſons will probably wonder how ſiliceous earth ſhould diſſolve in tartaric acid, as it reſiſts the action of acids much ſtronger than this; but it may be remarked, that as ſoon as it is united with any alkali, earth, or oxyd of metal, a weak acid is capable of diſſolving it.

It is therefore adviſable in preparing emetic tartar, to diſſolve as much of the vitrum antimonii in cremor tartari as is poſſible, to filter the ſolution warm, and let it afterwards evaporate till the reſiduum becomes dry. This is again diſſolved in hot water, and left to cryſtallize. By this means all ſiliceous earth diſſolved in the acid ſeparates at the end of the evaporation, and diſſolves no more; and at the ſame time the emetic is obtained in a greater quantity and a purer ſtate, than when the earth oppoſes the cryſtallization. *(Ibid.)*

Mr. Hermbstaedt mentions in a letter to Profeſſor Scherer of Halle, that he is preparing a new edition of his Experimental Chemiſtry, in which he conſiders the calorique or calorific principle, not as warm itſelf, but only as producing heat and the ſenſation of warmth merely as a phenomenon of extenſion, which affects our nerves, as warmth; on this account he calls the calorique, *thermogenium*. He likewiſe conſiders the light as lighting or illuminating, when it affects our eyes, and names it light-producing principle, *Photogenium*. To the unknown acidifiable baſis of Borax, he aſſigns the name of *Boraceum*; that of the fluoric acid he diſtinguiſhes with the name of *Fluoreum*; that of muriatic acid with *Muriacum*

Muriacum. He differs from Richter by conſidering the light-producing principle as ſimple and not yet decompoſed; but he allows, at the ſame time, that it is contained in all incombuſtible ſubſtances. (*Scherer's Journal of Chemiſtry*, in German, *Vol. IV. No.* 22, 1800.)

We are informed, that Mr. BLAIR, of the Lock Hoſpital and Finſbury Diſpenſary, aſſiſted by ſeveral other reſpectable ſurgeons, has been ſome time engaged in writing a comprehenſive *Syſtem of Medical and Operative Surgery*, adapted to the preſent improved practice at the London Hoſpitals, &c. We ſhall take an early opportunity of laying before our readers a more particular account of this undertaking, as a Proſpectus is ſaid to be in the preſs.

Mr. WILLIAM HENRY, of Mancheſter, has in the preſs, and in conſiderable forwardneſs, a ſmall work, intended, partly, to facilitate the acquirement of chemical knowledge to perſons entering on this ſtudy without the benefit of an inſtructor; and, partly, as a portable companion for the uſe of more advanced ſtudents. The firſt part will contain directions reſpecting the mode of learning chemiſtry, and, alſo, an arranged ſeries of experiments, neceſſary to be performed by thoſe who intend to become acquainted, by actual obſervation, with the chemical properties and habitudes of bodies. More minute and preciſe directions will be given for conducting theſe experiments with ſucceſs, than are to be found in other elementary books. The ſecond part will compriſe, Summary Inſtructions for the Analyſis of Mineral Waters and of Mineral Bodies in general. And the third part will point out ſome of the uſeful applications of chemical agents in detecting adulterations, diſcovering poiſons, &c. The work will form one ſmall pocket volume; and it may be proper to remark, that it will not at all interfere with the excellent little Manual lately publiſhed by Mr. Parkinſon, the plan and objects of which are perfectly different.

Dr. FERGUSON, of Aberdeen, has in the preſs an Eſſay on Fever, which will be publiſhed in a few months.

Dr. PEARSON's Lectures on the Practice of Phyſic, Materia Medica, and Chemiſtry, will re-commence in the Elaboratory, Whitcomb Street, Leiceſter Square, on Tueſday, February the 3d, at eight o'clock in the morning.

TO CORRESPONDENTS.

The Editors are again obliged to apologize to their Correſpondents for the omiſſion of ſeveral valuable Communications, and particularly for delaying an account of many Medical Publications, both domeſtic and foreign.

THE

Medical and Phyſical Journal.

VOL. V.] MARCH, 1801. [NO. XXV.

Obſervations on the Effects of the Digitalis Purpurea, in the Cure of Phthisis Pulmonalis.

To the EDITORS of the MEDICAL and PHYSICAL JOURNAL.

Gentlemen,

THE public attention has been fixed with a conſiderable degree of anxiety for the laſt two years, on the various contradictory accounts, publiſhed at different times, reſpecting the effects of the Digitalis as a ſucceſsful remedy in the cure of pulmonary conſumption Like every new and valuable diſcovery that has been made and applied to the removal of one or more of the afflicting catalogue of diſeaſes to which the human frame is ſubject, the Fox-glove has experienced the moſt unbounded praiſes, and the keeneſt cenſure. The advocates for the uſe of this medicine, as is uſual with all new diſcoveries, have extolled its virtues probably beyond the juſt bounds of truth, and what will not be found warranted by a more general and extenſive experience. On the other hand, its enemies have not only denied its poſſeſſing any antiphthiſical powers whatever, but have abſolutely condemned it as a dangerous and deleterious drug, which ought to be altogether excluded from medical practice, and ranked only in the claſs of the moſt deadly vegetable poiſons. The truth is moſt commonly found to lie between theſe extremes; and in no inſtance, perhaps, is this general rule more applicable than in the preſent.

Every profeſſional man, who ſets a juſt value on his own character, who feels intereſted in the fate of ſuffering humanity, and in the preſervation of thoſe more immediately committed to his care, muſt perceive the neceſſity of a cool and temperate inveſtigation of a ſubject, which involves in its conſequences the ſafety or deſtruction of thouſands of his fellow creatures. Few, I hope, will differ with me in this opinion; and yet, if

it were to be decided by a reference to the many publications which annually iſſue from the preſs, I am very apprehenſive the queſtion would be determined againſt me. If we enquire into the cauſes of theſe inconſiſtencies and contrarieties, they will be found in the various paſſions which but too commonly agitate the human breaſt; envy, jealouſy, claſhing of intereſts, in a ſpirit of oppoſition and rivalry.

If the publications before alluded to were the ſole rule to regulate our judgments by, it would appear from the aſperity of language employed, that in medical diſquiſitions, as in thoſe of politics and religion, the inveſtigation and diſcovery of truth do not form the baſis of diſcuſſion, or the great object contended for; but an anxious deſire on the part of the diſputants of convicting each other of mis-ſtatement and error, with an ardour and animoſity which always render the parties leſs reſpectable in the eyes of every diſpaſſionate and enlightened obſerver. It is true, that from the circumſcribed and limited nature of the human intellect, men even of the moſt enlarged ideas are frequently liable to error, and they would be ſtill more ſo, were they under no apprehenſions of having their opinions canvaſſed, their ſentiments controverted, and their works ſubjected to the laws of juſt criticiſm. When opinions are examined with calmneſs and impartiality, but with a bold and temperate freedom, the boundaries of ſcience are ſure to be extended and enlarged, and truth, as far as it is attainable by diſcuſſion, will become the certain reſult.

Two gentlemen, to whom the public and the profeſſion are certainly under obligations for the light they have thrown on the nature and properties of Digitalis, have, to the manifeſt injury of the cauſe they were defending, diſputed with intemperance, to ſay nothing elſe of it, on this intereſting ſubject: But I am happy, however, to ſee the contention likely to terminate by an effort of forbearance on the one part, which does the author honor; and it would undoubtedly be to the advantage of ſcience and urbanity, if the learned Editors of this Journal oppoſed as much as poſſible, diſputations carried on with animoſity, where paſſion uſurps the ſeat of reaſon, and prejudice that of truth.

It is the duty of every medical man, to exert his utmoſt abilities in endeavours to oppoſe barriers to the waſteful voids occaſioned ſo frequently in families and ſociety by the fatal effects of pulmonary conſumption; and he who devotes his leiſure and talents ſucceſsfully, in purſuit of means to check the career of this deſolating ſcourge, muſt deſerve well of his country and humanity.

During the time I had the charge and ſuperintendance of the Hoſpitals at Norman Croſs, I had occaſion to try the effects of the

the Digitalis on consumptive patients; and from the fortunate termination of Stroed's case, related at large in No. XII. page 128 of this Journal, I was extremely desirous of employing it still more extensively;—opportunities were not long wanting. On the 22d of Dec. 1799, the French government, in violation of its former engagements, thought proper to decline victualling the prisoners any longer in England; in consequence of this dishonourable step, I had orders from the Commissioners of sick and wounded Seamen, to take charge of the French sick as heretofore. I found in the wards, recently under the management of the Republican surgeons, eight patients, who had been in the hospital from four to seven months and upwards, all deeply affected by Phthisis. Six were in its last and most confirmed stage, and two in the second, supposing three stages an accurate division of the d'sease: Four out of the six were in so deplorable a state, that under any system of treatment their cases appeared quite desperate and hopeless. Thus circumstanced, they began the use of the Fox-glove in the form of tincture, which was gradually exhibited, and continued for three weeks; at the end of this time they were so much amended, that I began to entertain the pleasing and consoling hope, my endeavours would ultimately be crowned with success. The expectoration diminished to nearly one half; the cough considerably abated; the nightly perspirations, except in one, wholly disappeared; the pulse, in all of them, had gradually fallen from 100 and 110, to between 50 and 65; and the harrassing pains about the thorax and its vicinity were very generally relieved: But alas! these encouraging appearances were of short duration, and continued only a few days longer. The weather, which had been mild, and extremely favourable for the season, suddenly changed to cold sleet and frost, with a north-east wind, which, from the exposed site of the prison, its proximity to a large lake of water, and a marshy country lying east of it, blows here uncommonly keen. The consequence of these alterations was, that fresh excitement took place; the cough, expectoration, and all the other symptoms became highly aggravated; and after a long and severe struggle, five out of the eight fell a sacrifice to the malignity of the disease; two permanently recovered, and one was very much relieved; but being sent to France, I have had no opportunity of learning the issue of the contest. Justice obliges me to acknowledge, that the two who completely recovered were less affected than the others, though their expectoration was evidently purulent. From the extraordinary amendment which occurred in the commencement of their treatment, I am strongly inclined to believe, that, had the weather preserved the same

degree of temperature one month longer, three at leaſt out of the five, if not the whole, would have been probably reſtored to health.

Shortly after this period I was removed to the Royal Hoſpital at Plymouth, a ſituation which affords to medical induſtry a wider range, and more extenſive field for obſervation, in the proſecution of a ſubject ſo intereſting to humanity; a ſituation in which the powers, properties, and general effects of the Fox-glove on the animal œconomy may be aſcertained to a degree of exactneſs and preciſion, nearly approaching to mathematical certainty, if practical experience in variety and number of caſes, in every ſtage of the diſeaſe, is to form the criterion on which we are to ground a deciſive opinion, taking at the ſame time into conſideration, various adventitious circumſtances, as climate, or temperature of the atmoſphere, former habits, and the peculiar idioſyncraſy of the different objects intended to be ſubjected to its powerful influence.

The number of patients ſent to the Naval Hoſpital in the laſt ten months, and the mortality cauſed by this diſeaſe among the ſeamen and marines of his Majeſty's fleets, are truly alarming; a great portion of the men admitted during the above period actually laboured under Phthiſis, either in its incipient or moſt confirmed ſtage, but principally of the latter deſcription.

Among the cauſes that have contributed to increaſe the number affected with this conſuming malady may be mentioned as a principal, the continual and ſevere duty in which the channel fleet has been employed for many months paſt, being ſeldom more than a few days in port, and that only when abſolute neceſſity compelled it, to victual and water.

Of the prodigious numbers received from the ſhips of war and marine barracks, labouring under Phthiſis Pulmonalis in its incipient or confirmed ſtage, I have here ſelected ſeventy-two patients who were ſubjected to the powerful influence of the Digitalis; but as the limits of the Medical and Phyſical Journal cannot poſſibly admit of a detailed ſtatement of ſuch a variety of unhappy caſes, I ſhall give only the hiſtory of three or four of the moſt marked and deciſive, in which the operation and good effects of the medicine were conſpicuous; the remaining number, as well as thoſe narrated more at large, I inſert in a Table, with the general reſults, as the moſt conciſe mode of exhibiting ſuch an unwieldy body of evidence.

William White, aged about 28, a ſeaman belonging to his Majeſty's ſhip Gibraltar, was admitted on the 12th of Auguſt, 1800, in the laſt and moſt confirmed ſtage of phthiſis pulmonalis. He had been ill for ſeveral months with cough continually increaſing in ſeverity, and which was now inceſſant;

pain

pain in both ſides of the thorax, eſpecially in the left, running along the cartilaginous extremities of the ribs; expectoration profuſe of greeniſh pus, extremely fœtid, now and then ſtreaked with blood; heavy perſpirations, with febrile exacerbations night and morning. He particularly complained of a throbbing pain ſeated between the ſeventh and eighth ribs; and the cutis covering this part, externally, was diſcoloured in a very curious manner, about the circumference of a crown piece: The reſpiration oppreſſed and laborious; he could only lie on his back; and the pulſe beat 108 ſtrokes in a minute.

Under this accumulated ſtate of diſeaſe and wretchedneſs, no very ſanguine hopes could be entertained of his recovery; in ſhort, I conſidered him as one out of the great many unfortunate objects, ſent to the Hoſpital to die in a few days. May I not aſk here with propriety, why this man had been kept ſo long on board ſhip in ſuch a deplorable ſtate? He began the Digitalis, however, this day, in doſes of ſeven drops every four hours, in a ſperm. cæti mixture with tinct. opii camp. On the 13th, after a ſevere fit of coughing, he brought up half a pint of very offenſive matter. Rept. Tinct. Digital. gt. L. 15th, Tinct. gt. LX. 16th, LXX. 17th and 18th, No alteration in his condition; the tincture increaſed by ten drops daily. 19th, Tinct. gt. C. ſlight nauſea; expectoration copious; cough ſevere; allowed four or five glaſſes of wine daily; pulſe 90. From the 20th to the 24th, the medicine regularly augmented in the proportion before mentioned. 25th, The expectoration not ſo abundant, with leſs fœtor; tinct. gt. CL. pulſe 78. 26th, Tinct. gt. CLX. 27th, Tinct. gt. CLXX. 28th, Tinct. gt. CLXXX. 29th, Nauſea, with vomiting, occurred yeſterday; diminiſhed the tinct. to gt. CXXX. pulſe 48, and irregular. 30th, Nauſea almoſt removed; pulſe 48, more ſteady. 31ſt, Pain and oppreſſion about the præcordia; App. empl. canthar. ſcrob. cord. Nauſea and ſickneſs entirely gone; expectoration viſibly diminiſhing; pulſe 52; tinct. gt. CXL. Sept. 1ſt, Tinct. gt. CL. The 2d, 3d, 4th, and 5th, the tinct. regularly increaſed. 6th, Tinct. gt. CLXXX. Nauſea, vertigo, with an intermittent pulſe at 46. 7th. Nauſea and dizzineſs continue, but the cough greatly abated; the expectoration reduced to half the original quantity; the greeniſh hue removed; the fœtor gone; ſcarcely any perſpirations for the laſt three nights. 8th, Tinct. gt. CC. 9th, Nauſea in the morning; pulſe irregular, and intermitted for ſeveral days. 10th, Tinct. gt. CCXX. 11th, 12th, and 13, Nauſea with ſlight vomitings, prevented an augmentation of the tincture during the laſt three days; pulſe from 44 to 50, irregular; expectoration aſtoniſhingly diminiſhed, and every other ſymptom much abated.

14th,

14th, Naufea and vertigo gone; Tinct. gt. ccxxx. 16th, Scarcely any cough now remaining. 17th, Tinct. gt. ccxxx. flight naufea; pulfe 48. 18th, Tinct. gt. ccxl. 19th, Tinct. ccl. expectoration reduced to a table fpoonful. 22d, Hardly a veftige of difeafe remained; every part of the thorax completely freed from pain; even his ftrength was much amended. As the difeafe removed, he could bear larger dofes of the medicine, which was ftill continued. 25th, With a pulfe at 56, he was as free from complaint as at any one period of his life, bodily ftrength alone excepted: The Digitalis ftill perfevered in and augmented. On the 29th of Sept. he was difcharged the hofpital, perfectly reftored to health. A few days after his reception, he was invalided as a hectic patient, there being little hope at the time of his ever leaving the ward in a living ftate. Of this, the man was himfelf fo fenfible, that he has fince written a letter, acknowledging his obligations in the ftrongeft terms of gratitude.

James Smith, aged 26, a feaman belonging to his Majefty's fhip Ville de Paris, admitted on the 6th of October laft. Has been ill a long time with phthifis; he was affected with every fymptom which is the ufual concomitant of the difeafe in its laft and moft aggravated ftage; conftant and deep feated pain in both fides, but more particularly in the left; expectoration profufe, and rankly purulent, emitting a moft difagreeable fœtor; regular attacks of febrile exacerbations every evening; profufe colliquative fweats; formerly fubject to frequent hæmorrhages from the lungs, but nothing of that kind had occurred lately: He was reduced to the loweft ftate of debility, although twelve months before of Herculean powers, as one of his mefs-mates informed me. The moment I faw this man, I pronounced it a loft cafe: Notwithftanding thefe unfavourable appearances, he began the Tinct. Digital. in fmall dofes, which were gradually increafed, and fyftematically perfevered in till the 21ft of Nov. on which day he was difcharged, cured. The expectoration, originally a pint and a half, was reduced to about a table fpoonful or lefs, and wholly free from purulence; the nightly perfpirations had ceafed upwards of twelve days; the thorax was completely freed from pain; and the cough had for fome days totally difappeared, except for a few minutes after his firft getting out of bed in the morning. I wifhed much to put him on a courfe of chalybeate tonics before his difcharge; but having been previoufly invalided, he became extremely anxious to fee his friends in Ireland, and ftill more fo, fearing that an alteration in the weather might give him freth cold in travelling, fhould the froft fet in before his departure. He was confined to his bed near three weeks whilft under the influence

influence of the medicine, in such an extreme state of insensibility all the time, that at first he could only get out to the night-chair with the assistance of a nurse. The pulse gradually fell from 110 to 60, but never lower; and for a long time the tincture could not be pushed beyond 100 drops in the day; I was twice under the necessity of reducing the daily quantity to 50 drops: But as the cure advanced and his strength increased, he could bear larger doses; for ten days previous to his dismissal, he took to the amount of 160 drops a day; beyond that, the medicine disordered the head and stomach.

Mr. William Campbell, of his Majesty's ship Barfleur, 23 years of age, was admitted on the 27th July, 1800, labouring under Phthisis. He was greatly emaciated, expectorated confirmed pus, a fixed pain of the side, a deep hollow cough, febrile exacerbations, profuse nightly perspirations, a pearly whiteness of the eyes, great thirst, oppressed and difficult respiration, head-ach, and a pulse above 100 in a minute. On this day he began the use of the Digitalis, which was by degrees increased till the daily quantity amounted to 160 drops; this was the utmost extent to which the tincture could be pushed, without disordering the head and stomach. The pulse gradually sunk, the cough and expectoration at length wholly disappeared, every other hectic symptom by degrees vanished, and on the 7th of September he was discharged, completely restored to health.

James Herritage, seaman, 29 years of age, was admitted for the second time into the hospital on the 14th August, 1800. He had long been subject to severe pain of the breast, incessant cough, purulent expectoration, sometimes mixed with blood, much emaciation, loss of appetite, febrile rigors attended with colliquative and profuse sweats at night, with a pulse at 108. The Digitalis was, as usual, exhibited in small doses, which were systematically increased by ten drops a day, until towards the termination of his cure he could bear the astonishing dose of 100 drops three times a day. I repeatedly and personally exhibited the medicine myself. He was surveyed, and would have been invalided; but at my request was permitted to remain, as I then judged him fast advancing towards a perfect cure, in which I happily succeeded. The pulse gradually sunk to 60 pulsations in a minute, but never fell lower, notwithstanding the enormous doses which he took of the medicine. He was discharged to duty on the 29th September, forty-three days after his reception.

James Wallace, a seaman, was received into the hospital on the 14th September last. He had at this time been two years and upwards subject to cough; he now complained of a deep seated

ſeated pain in the right ſide, and about the ſcrob. cord. expectorated a thin ſanious and purulent matter, emitting a moſt intolerable ſtench; the fœtor of his breath was ſo extremely offenſive, that I was conſtantly obliged to turn my head aſide when examining into the ſtate of his pulſe, and the nurſes were often affected by nauſea and ſickneſs when in the act of aſſiſting him with drink, &c. a laborious and oppreſſed reſpiration; but he had neither rigors nor night ſweats, except in a very trifling degree. The pulſe fell by regular gradation from 104 to 46, and continued in this extraordinary ſtate of depreſſion for five weeks, never aſcending higher than 54 all the time: he could never go beyond 100 drops of the tincture in 24 hours, and yet this quantity was ſufficient to bring down and keep the pulſe at the extreme reduction above-mentioned.

He was diſcharged cured on the 28th of November, 1800. As I had not the moſt diſtant hope of this man's recovery, conſidering him in a cadaverous or ſemi-putreſcent ſtate at the commencement, he was ſubmitted to ſurvey, and accordingly invalided.

In theſe great variety of caſes, the medicine was frequently given under my own immediate inſpection, or that of my aſſiſtants, eſpecially when the doſes amounted to what is deemed very large, in order to be certain that we were not deceived by the patients. Many were in the habit of taking from 150 to 300 drops in the day, firſt commencing with 20, 30, 40, or 50 drops, regulating the quantity according to the apparent ſtrength and vigour of the patient; and increaſing the number daily by ten drops, till the ſtomach began to ſhow ſlight ſymptoms of anorexia, or the patient complained of dizzineſs and imperfect viſion, accompanied with a conſiderable reduction of the pulſe: Whenever one or more of theſe ſymptoms occur, the doſes are immediately reduced, either one half or the quantity originally commenced with; but if the head and ſtomach ſhould ſtill be unable to bear theſe reduced doſes from the irritation previouſly induced, a circumſtance, however, to be ſedulouſly guarded againſt, the medicine is then wholly omitted for one, two, or three days, after which it is again exhibited as at the firſt onſet.

The vehicle in which I uſually adminiſter this medicine is, a mixture of Sper. Ceti. Tinct. Op. Cam. et Ox. Scil. from two to three table ſpoons full, to be taken every four or ſix hours; ſo that the quantity with which the patient generally commences, is from ſeven to ten drops at a doſe. It is ſometimes exhibited in Decoct. Cinch. c. Elix. Vit. et Tinct. Cinch. and the formula varied according to the particular urgency of ſymptoms. The patient is uſually permitted to take a few glaſſes of wine daily,

daily, and sometimes to the quantity of a pint, when coll quative sweats and great debility render it necessary.

By these means, and by these precautions, I have been able to exhibit it to the great extent already specified.

In comparing these quantities with the doses administered by several of your correspondents in private practice, I have been much struck with the great and material difference between us, as those gentlemen were seldom able to go beyond 90 or 110 drops; and that in few instances. To what can we impute the cause of these contrarieties of results? Either it must arise from the inferior powers of the plant of which the tincture is here made; from the imagination of a certain description of patients; from the few opportunities occurring in private practice of trying the Digitalis on a variety of constitutions; or from a combination of some or all these circumstances. With respect to the first, Mr. Hammick, the dispenser of the hospital, informs me, that the Fox-glove of which the tincture is made, is commonly procured from the Hall, and the proportions are 1 oz. gross powder, to 4 oz. of proof spirit. 2dly, Private patients being in some measure acquainted with the active properties of the medicine, and seeing it dropt with great caution, expect from it certain effects, with which the imagination is fully impressed. And lastly, many constitutions will hardly bear the smallest doses, without exciting very general tumult in the system. I have now several under my care that cannot go beyond 70 drops a day, and two who are not able to bear 40 drops, or six at a dose.

Mr. Fuge, first surgeon to the hospital, having directed his attention to this subject, and in order to ensure greater accuracy, was at the trouble of collecting the plant himself, and of making the tincture, in the proportion of four ounces of fresh gathered leaves to five of proof spirit: Of this tincture he had the politeness to send me eight ounces; and I found on trial, that ten drops of it were equal to nearly fifteen of what I was then in the habit of prescribing. This circumstance demonstrates fully the absolute necessity of a standard and fixed formula from authority, to regulate general practice by; and likewise the necessity of great caution in the exhibition of this valuable medicine, before the strength of the tincture is accurately ascertained.

The effects of the Digitalis on different constitutions, is strongly exemplified in two patients now under my care: In one, the medicine cannot be pushed to forty drops a day, without inducing nausea, vertigo, and very general derangement of the system; the other, Robert Skinner, has taken one hundred drops three times a day, without producing the smallest uneasi-

neſs whatever, not even intermiſſion or irregularity of the pulſe, an effect that very generally follows the uſe of this medicine when given in full doſes. A conſiderable reduction of the pulſe, however, took place, which the following morning was ſteady and regular at 60 pulſations in a minute; the medicine being wholly omitted the following day, the pulſe roſe to ſeventy-ſix. I have met with ſeveral inſtances in which the Digitalis, given freely and largely, effected not the ſmalleſt reduction in the pulſe; and in theſe, the patients uniformly derived no advantage whatever from its uſe. I ſhall briefly ſubjoin two caſes to illuſtrate this point; one occurred at Norman Croſs, the other at the Royal Hoſpital.

Henry Velcamp, a Dutch priſoner of war, but a Frenchman by birth, was admitted into the hoſpital repeatedly during the laſt ten months, generally for the cure of pleuritic affections.—Some time before the 25th of October, 1799, he complained of pain in the left ſide, as he had indeed often done before, ſevere cough, copious expectoration though not purulent, difficult reſpiration with a ſomewhat hard pulſe and a conſtipated ſtate of the bowels. He was immediately preſcribed a ſaline cathartic, a large bliſter to the part affected, and a mixture of Sperm. ceti. aq. am. acet. et ſal. nitr. This plan was perſevered in till the 30th, with little or no amendment. On this day ordered Tinct. Digit. gt. xv. bis die, in two ounces of the above mixture.—Nov. 1, Tinct. gt. xv. ter die.—2d, Tinct. gt. xx. ter die. The tincture was regularly increaſed by five drops a doſe, till he took 165 drops daily. On the 9th I was quite aſtoniſhed that no alteration followed with reſpect to the head, ſtomach, and in the number of pulſations, being never fewer from the commencement than 100 to 110. Anxious to examine the condition of the blood, I directed three ounces to be taken away; but notwithſtanding the rapidity of the circulation, and the apparent wirineſs of the pulſe, the blood ſhewed no ſigns of inflammation. The tincture was continued till the 12th, on which day he took 210 drops, that is, 70 drops three times a day; but finding no alteration in the pulſe, or general ſtate of the patient for the better, on the contrary he was daily getting worſe, the Digitalis was diſcontinued altogether; he lived only ſix days longer, notwithſtanding the application of other remedies, and fell a victim to the diſorder on the 18th of November. From the unuſual ſymptoms attending this caſe throughout, and the failure of the Digitalis in abating the force of the vaſcular ſyſtem, I was very deſirous of examining into the ſtate of the viſcera. The body was accordingly opened by my head aſſiſtant, Mr. Woodham. The liver was found much enlarged, with the appearance of an incipient

incipient gangrene along its extreme edge; the gall bladder was nearly empty, containing only a small quantity of a dark viscid bile; the lungs were full of tubercles, though few in a state of suppuration; no adhesions to the pleura had taken place, and all the other viscera were perfectly sound.

Benjamin Eve, a seaman, belonging to his Majesty's ship Superb, a young man about 22 years of age, was admitted on the 26th September last, labouring under Phthisis, his countenance strongly indicating the nature of his disease. He was subject to nightly sweats, attended with hectic rigors morning and evening, copious expectoration of bloody pus, and constant cough. He had been subject to frequent hæmorrhagies from the lungs for some months previous to his admission, and although not so frequent now, yet they sometimes did occur. He began the Digitalis on the 27th, which was regularly continued and gradually increased till the daily quantity amounted to 230 drops; this was on the 42d day from its commencement. During all the time, it neither abated the force or reduced the frequency of the pulse, which was never under 100, but most commonly at 110 to 120; nor did the disease receive the smallest apparent check in its career. He was about this time invalided and discharged at his own request, soon probably to fall a victim to this horrible malady. Here is a case in which the Digitalis entirely failed, where it had a fair trial. I might adduce others, to prove that the effects of this medicine will be various and diversified on different constitutions:

I have never perceived in any one instance the smallest tendency in the medicine to act on the kidneys, even when given in the largest doses; and this is the more extraordinary, as it was first introduced to the public notice under the character of a powerful remedy in the cure of dropsy. The Digitalis not only failed on all occasions of having any diuretic effect; but what is still more to be wondered at is, that it actually produced, and has been the cause of the very disease in question; an effect which might naturally be supposed to arise from it in reasoning theoretically on the properties of this plant, from its sedative operation on the force and vigour of the vascular system. This is a consequence which I say might naturally be deduced from theory, and which will now be seen confirmed by the following facts. It is therefore necessary to point out to the inexperienced practitioner, the possibility of such an occurrence, that in his endeavours to remove one disease, he may not substitute another equally fatal.

Two instances have lately occurred in the course of my practice at the Royal Hospital, which confirm the justness of the above observations; and that I may not swell this article

beyond all moderate bounds, I subjoin one case only. David Johnston, a young lad, about 17 years of age, the son of one of the nurses, had long complained of severe cough, oppressed and difficult respiration; his expectoration was now purulent, his eyes of a pearly whiteness, which is often a sure indication of confirmed phthisis; he was much emaciated in consequence of nightly sweats, attended with regular febrile exacerbations, and a pulse above 100 in a minute. In short, this lad was so ill that I expressed my opinion to Mr. Peters, physical assistant, that it was probably a lost case. The tincture was however exhibited in reduced doses, which were gradually increased and regularly continued till the end of September, having commenced about the close of the previous month; and to my very great surprise all the hectic symptoms were by this time entirely removed; a very extraordinary and rapid cure in a case of phthisis so strongly marked. The medicine was still continued, but in a few days his lower extremities began to swell, which rapidly extended to the trunk, and presently after he was universally anasarcous with evident fluctuation in the cavity of the abdomen. The Digitalis was now wholly omitted, and the patient ordered the chalybeate diuretic mixture, the good effects of which I had already so happily experienced in the cure of dropsy; and it proved equally successful in the case at present under consideration. In fourteen days the lad was completely restored to health, which still continues up to this moment.

This is a case, which, when considered with attention, and duly reflected on, must throw great light on the nature, properties, and modus operandi of the Fox-glove; it gradually and silently sunk the vigour, and abated the force of the whole system, but most conspicuously so that of the vascular; the pulse fell in a few days from 100 in a minute to under 50, and was retained in this state of depression, till every symptom of phthisis had wholly disappeared; this being a disease having principally for basis, irritation, and a preternaturally increased velocity of the circulation, ultimately inducing particular local affection, which, by constant attrition, exhausts the sensorial power and wears down the constitution. The morbid catenation of associated symptoms once destroyed, or in other words, the over-plus of preternatural action in the minute and secretory vessels of the lungs once reduced to the healthy standard, the system still continuing under the powerful influence and sedative effects of the medicine, a disease of diminished excitement, the reverse of the former, is super-induced; that is, dropsy became the consequence, which in its turn yielded to the stimulus and invigorating powers of steel combined with diuretics.

In

In maturely weighing all the facts and circumstances here adduced, I am inclined to impute the salutary influence exerted by the Digitalis over Phthisis, to its widely diffusing property of diminishing morbid excitement throughout the animal œconomy; and not to any peculiar specific power it possesses of promoting absorption either general or local, which is supposed to be its modus operandi in the cure of dropsy and phthisis.—For it appears contrary to analogical reasoning drawn from the known laws of the animal œconomy, that a medicine which so forcibly retards the motion of the heart and arteries, should at the same time increase that of the absorbent system; a consequence that must necessarily arise, in order to remove fluids deposited in the different cells and cavities of the body.

It is not then the rapid absorption of secreted and aerated pus from the surface of diseased parts, on which the cure of phthisis depends, but on the diminution and total extinction of morbid increased action in the extremities of the pulmonic vessels; thereby cutting off the sole source and cause of secretion; which, when once effected, the disease ceases to exist. This opinion is still farther corroborated, when it is recollected, that in all those cases wherein the tincture failed of effecting a reduction of the pulse, no amendment followed its use.

To administer the Digitalis under every favourable circumstance, and to render its success the more certain, it is of the utmost importance to attend carefully to the state of the atmosphere; frequent changes and sudden transitions of temperature are sedulously to be guarded against: The practitioner who loses sight of this consideration, or thinks lightly of it, will be generally foiled in his efforts to cure Phthisis Pulmonalis, even when assisted by the powerful effects of the Fox-glove. A state of weather which commands a range of the thermometer, lying between 55 and 65 degrees, is the best adapted to the successful treatment of hectic patients. Winter is therefore the most unfavourable season for those labouring under phthisis; and I am fully convinced, that many fall victims to the disease at this period of the year, that would most probably have recovered in summer. Beside the cases in point already adduced to support the truth of this assertion, I had two remarkable instances at the Royal Hospital. John Wilson, now no more, after using the Digitalis for five weeks, was considerably better; but on the approach of winter, the weather alternating frequently with heat and cold, fresh excitement took place, and proved fatal to him. The other, Jameson, still living; but who, without the immediate interposition of Omniscience, must likewise die, was at one time so far recovered, that I considered his cure certain. He was admitted in the last stage of Phthisis, and from a pint

of

of pure matter, the expectoration diminiſhed to about two table ſpoons full, and that not purulent. Change of temperature induced a relapſe, and he is now on the verge of eternity. The Tinct. Digit. had in theſe two caſes a complete trial, but failed.

I have choſen the annexed tabular form, as conveying at one luminous view the whole of the information which I have collected on this important queſtion, from the opportunities afforded by my ſtation at the Royal Hoſpital. By this, with what has been already publiſhed by other gentlemen, the public and the profeſſion will be enabled to appreciate the real value, or at leaſt make a much nearer approach in appreciating the real value of this extraordinary medicine. They will perceive, that although it will cure Phthiſis in its moſt advanced and aggravated ſtage; yet, that it will fail in many inſtances of a ſimilar nature, and that, even when the diſeaſe is ſtill in its incipient ſtate. To promiſe and to expect more from this or any other medicine, in the treatment of general diſeaſes, will, I fear, be holding out falſe lights to deceive inexperience, to wound truth, to injure and retard ſcience.

It is of great conſequence that the properties of this medicine ſhould be accurately defined, as the cautious and timid practitioner, and thoſe whoſe ſphere of practice is limited to few opportunities of trying the effects of new and doubtful remedies, muſt wait the deciſion of this queſtion with an impatience and ſolicitude proportioned to the weight and importance of the ſubject.

Upon the whole, it will be found a valuable addition to our ſtock of knowledge in Therapeutics, already under ſo many obligations to this age of improvement; but too often, of unhappy innovation.

I cannot quit this ſubject, without firſt acknowledging many obligations to Doctor Drake, for having attracted my attention to the valuable properties of the Digitalis, in his accurate narrative of its effects on Maris and Grimes, publiſhed in Doctor Beddoe's volume of Contributions.

I remain, &c.

Royal Hoſpital, 20 *Jan.* 1801. J. MAGENNIS, M. D.

P. S. In a paper of mine on Epilepſy, page 419 of No. XXI. of your Journal, an error has crept in; inſtead of irritability, it ſhould run, general *inirritability*.

NAMES

NAMES.	STAGE.	RESULT.
Matthew Hall, S.	Purulent.	Recovered.
Gregory M'Donnald, S.	Purulent.	Recovered.
Thomas Davis, S.	Purulent.	Recovered.
James Craig, S.	Purulent.	Recovered.
Henry Downing, S.	Purulent.	Recovered.
William Hill, M.	Purulent.	Recovered.
John Caruthers, S.	Purulent.	Recovered.
Joſeph Cork, M.	Purulent.	Recovered.
Mr. W. Campbell.	Purulent.	Recovered.
William Hammond, S.	Purulent.	Recovered.
Thomas Swift, S.	Purulent.	Recovered.
William White, S.	Purulent.	Recovered.
James Herritage, S.	Purulent.	Recovered.
William Thorn, M.	Purulent.	Recovered.
William Grin, S.	Purulent.	Recovered.
Robert Searle, S.	Purulent.	Recovered.
James Smith, S.	Purulent.	Recovered.
James Wallace, S.	Purulent.	Recovered.
William Brown, S.	Purulent.	Recovered.
David Johnſon.	Purulent.	Recovered.
Robert Skinner, S.	Purulent.	Recovered.
—— Kennedy, S.	Purulent.	Recovered.
—— Wallace, S.	Purulent.	Recovered.
James Karns, M.	Purulent.	Recovered.
Patrick Byrne, M.	Purulent.	Recovered.
Paul Laurence, M.	Incipient.	Recovered.
James Hardy, S.	Incipient.	Recovered.
John Cleverly, M.	Incipient.	Recovered.
John Wilkins, S.	Incipient.	Recovered.
Michael Raferty, S.	Incipient.	Recovered.
James Ruſſel, M.	Incipient.	Recovered.
Roger Roony, S.	Incipient.	Recovered.
Michael Anderſon, S.	Incipient.	Recovered.
Mr. J. Weſt, ſurgeon's mate.	Incipient.	Recovered.
Cornelius Dogherty, S.	Incipient.	Recovered.
Samuel Beſt, M.	Incipient.	Recovered.
John Smith, M.	Incipient.	Recovered.
John French, M.	Incipient.	Recovered.
Hugh M'Guire, M.	Incipient.	Recovered.
John Daly, captain's clerk	Incipient.	Recovered.

Anthony

NAMES.	STAGE.	RESULTS.
Anthony Francis, S.	Purulent.	Died. Uſed the Digit. 21 days.
Luke Bunter, S.	Purulent.	Died. Uſed ditto 14 days.
Matthew Shires, S.	Purulent.	Died. Uſed ditto 15 days.
Daniel Ruſe, S.	Purulent.	Died. Uſed ditto 17 days.
Benjamin Chapman S.	Purulent.	Died. Uſed ditto 10 days.
James Bridon, S.	Purulent.	Died. Uſed ditto 19 days.
John Wilſon, S.	Purulent.	Died. Uſed ditto ſix weeks.
—— Jameſon, S.	Purulent.	At one time much better; now dying.
Patrick M'Elwain, S.	Purulent.	Diſcharged much better. Since died in Ireland.
Andrew M'Tegart, S.	Purulent.	Diſcharged much relieved; but Incipient.
James Bradley, S.	Purulent.	Ditto, much relieved, ditto
James Williams, S.	Purulent.	Ditto, ditto, ditto.
Charles M'Carty, S.	Purulent.	Ditto, ditto, ditto.
Mr. Todd	Purulent.	Ditto, ditto, ditto.
William Thompſon, S.	Purulent.	Ditto, ditto, ditto.
Stephen Cornwall, S.	Purulent.	Ditto, ditto, ditto.
Robert Edwardſon, S.	Purulent.	Ditto, ditto, ditto.
John Miniman, S.	Purulent.	Ditto, ditto, ditto.
James Johnſon, S.	Purulent.	Ditto, ditto, ditto.
James Stone.	Purulent.	Ditto, ditto, ditto.
James Madden.	Purulent.	Ditto, ditto, ditto.
Benjamin Eve, S.	Purulent.	The Digit. completely failed, altho' he took it ſix weeks.
George M'Nally.	Purulent.	Much relieved.
Robert Squire, S.	Incipient.	Much relieved.
David Rollins, S.	Incipient.	Diſcharged, much relieved.
Daniel Gallagan, S.	Incipient.	Ditto, ditto.
William Caſey, S.	Incipient.	Ditto, ditto.
Robert Kelly, S.	Incipient.	Ditto, ditto.
Robert Taylor, S.	Incipient.	Ditto, ditto.
Edward Hoſkins, M.	Incipient.	Ditto, ditto.
James Hutton.	Incipient.	Ditto, ditto.
James Candy, M.	Incipient.	Ditto, ditto.

*** Names marked S. are Seamen. Thoſe marked M. are Marines.

To

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

ON peruſing a paper of Mr. Ballard, ſurgeon in the Royal Navy, inſerted in No. XXI. of your valuable Journal, on a particular ſpecies of Ulcer; my having been for ſome years an aſſiſtant ſurgeon to the Royal Naval Hoſpital at Haſlar, enables me to give the moſt ſucceſsful mode I could find of treating that ſpecies of ulcer at the above Hoſpital. When thoſe kind of patients were firſt received, they were well waſhed with warm water and ſoap, and if the general debility was not very great, had a doſe of ſome laxative medicine; after its operation, an opiate, the ulcer dreſſed with a large emollient cataplaſm, compoſed of linſeed meal and fine pollard, and before each dreſſing fomented with a ſtrong decoction of Peruvian bark and poppy heads for the ſpace of half an hour, the dreſſing renewed in general twice a day; but if the ulcer was very foul, with great diſcharge and extenſive ſloughs, it was dreſſed oftener, till it put on a healthy granulating appearance. During the above time, the patient took daily a pint or ſometimes more of a decoction of Peruvian bark, after its having gone through the vinous fermentation; the common drink was lemonade; and whilſt in great pain, one grain of opium was given twice or thrice a day, with a double doſe at night; the ſymptomatic fever which generally attended, was commonly abated by the above means in a few days; wine and porter were alſo given occaſionally to ſuch caſes as required: The ulcer being by the above means brought to a clean healthy appearance, ſlight ſtimulating applications, as cuprum vitriolatum, argentum nitratum, &c. were applied round its edges, in order to accelerate its cicatrization, and a pledget of ſperm. ceti cerate very thinly ſpread upon lint put over the whole ulcer, with a ſoft linen compreſs over that, and a moderately tight bandage over all; the dreſſing renewed once or twice in the twenty-four hours, according to the quantity of diſcharge. After being brought to a ſmall ſize, it often proved very obſtinate to heal over compleat; to accelerate which, Mr. Baynton's very excellent mode of treating ulcerated legs, &c. by adheſive plaſters, proved very ſucceſsful, when ſuch happened to be in any of the extremities, and the inferior extremities are the chief ſubject of ſuch ulcers.—During the cure, the patients lived chiefly on animal food and vegetables, with good ſoup, which, no doubt, contributed in a great degree to mend the general health, as the patients' countenances on their firſt admiſſion always appeared wan and dejected, which was a

proof that digeſtion and chylification went on but imperfectly; therefore, I have every reaſon to believe, if the nitrous fumigation is perſiſted in daily on ſhip board, particularly in the Sick Bay, with frequently bathing the men in the cold or tepid ſalt water bath, would tend very much to invigorate their ſyſtems, better enable the organs of digeſtion to perform their office, and prevent the contagion of thoſe ulcers, as it is evident their contagion and obſtinacy proceed from the vitiated ſtate of the body; for if any eſcharotic is applied to them before the general habit is mended, it corrodes the muſcular ſubſtance, whereas, if the habit of body is good, it will produce fine florid granulations.

During the whole of laſt winter, I was attending the ſick and wounded Ruſſian troops, that were received into the temporary general Hoſpital at N. Yarmouth, after being wounded in Holland. From the number we had there, they were obliged to be ſtowed very cloſe together in low ceiled houſes, and ſome of thoſe houſes ſituated in very cloſe ſwampy ſituations, where they could get but little light, and leſs good air; the fœtor of their wounds, as may be ſuppoſed, muſt be great, and the men being naturally filthy in their perſons, muſt make it ſtill worſe; however, by the ſtrict attention paid to the nitrous fumigation, and frequent uſe of the ſalt water bath, by order of Dr. Scot, Aſſiſtant Inſpector of Hoſpitals, who ſuperintended the medical department there, every appearance of contagion was prevented. In ſome of the convaleſcent quarters, a few caſes of ſynochus broke out; but by ſeparating them, and perſevering in the fumigation, it went no farther. I applied the nitrous gas to foul ſloughing ulcers, by means of a tube from the top of a patent fumigating lamp, and it had the effect of clearing them; but the foulneſs and ſloughing returned in few dreſſings after the gas was omitted; thoſe ulcers were afterwards brought to a clean healthy ſtate by the application of the common cataplaſm, made with ſea in lieu of common water, and applied cold, without any intervening ſubſtance, except in ſome caſes, where, from the irritability of the ulcer it could not be borne; in thoſe caſes dry lint anſwered the intention better than greaſy applications; in ſome of them I was obliged to continue the poultice till the ulcer compleatly healed, for when it was left off the ulcer relapſed, but renewing the poultice ſoon counteracted its regeneration. In ſome of thoſe vitiated ulcers, the common poultice, with the cortical part of a freſh carrot ſcraped fine, and applied over it, had alſo a very good effect; I gave no medicine internally to them, except an opiate at night, whilſt the appetite kept good, and a good nouriſhing diet of animal food boiled down

down into ſoup, with plenty of vegetables and Scotch barley or oatmeal to thicken it.

I alſo applied the nitrous fumigation in caſes of ſynochus, by placing two fumigating lamps, one on each ſide of the patient's bed: The effects were in a ſhort time viſible, he expreſſed that a glow was coming over him; the pulſe raiſed fifteen ſtrokes in the minute in the ſpace of two hours, and a free perſpiration followed, and then he fell into a ſound ſleep for ſome time. When he awoke, he aſked for drink; and by perſevering in the fumigation and the uſe of bark and opium, he recovered. If you think the above ſketches worth inſerting in your Journal, you will oblige a conſtant reader by ſo doing. I am, &c.

W. EDWARDS,
Member of the College of Surgeons in London, &c.

Taunton Barracks, Jan 8th, 1801.

Mr. BRADLEY'S *Cases in Surgery, &c.* Communicated by Mr. JOHN PEARSON, Surgeon, Golden Square.

A Case of Abscess in the Groin.

ELIZABETH MARSDEN, an unmarried woman, aged 33 years at the time of her death, was, in the early part of November, 1786, ſeized with pain and heat in the region of the ſtomach, attended with a ſmall and quick pulſe, thirſt, alternate rigors and heats, with other indications of internal inflammation. In conſequence of a diſpoſition to vomit, fifteen grains of the pulv. ipecac. with two drachms of the antimonial wine, were given in a ſmall draught, which puked her three times; after this, ſeventy grains of *Fordyce's prophylactic powder* were given, which procured her three or four motions. The ſaline mixture was alſo ordered, and a bliſter applied to the ſtomach; theſe remedies relieved her for that time; but having occaſion to remove to a diſtant part of the country, ſhe ſoon after grew worſe, and, in conſequence, applied to other practitioners.

After an abſence of fourteen months, ſhe returned with a large circumſcribed ſulneſs, or tumour, occupying the part previouſly affected, attended with pain and uneaſineſs, eſpecially on preſſure, but without diſcolouration, or any evident ſigns of containing matter: A ſlight hectic was preſent, which

ſeemed to have conſiderably affected her health. Five months after this ſhe was ſeized with *cholera morbus*, which, after continuing violent four or five days, ceaſed, but ever afterwards returned, though generally in a leſs immoderate degree, three or four times, or oftener, in a year, till the time of her death. This firſt attack produced a very conſiderable effect in reducing the tumour, and the remaining fulneſs was entirely removed by the ſubſequent evacuations; theſe generally weakened her much, but ſoon afterwards ſhe regained a tolerable portion of health.

In the latter part of the year 1788, ſhe had ſymptoms of a crural hernia, for which a ſteel truſs was applied, and worn for ſome time, (but how long I could never learn) till, imagining herſelf well, it was, as is too often the caſe, diſcontinued.

In the beginning of May, 1794, and ſome time ſubſequent to the uſe of her truſs, ſhe had again ſymptoms of her hernia, which, in a month or ſix weeks, had protruded as formerly. On the 6th of July following, ſhe was ſeized with a conſiderable vomiting, and at the ſame time had a profuſe ſtool; theſe evacuations were ſucceeded by pain in the hernia and lower part of the abdomen, which continued diſtreſſing till the 8th, when I found her feveriſh, having a ſmall and quick pulſe, conſiderable thirſt, frequent rigors, alternated with heats and pain, and difficulty in making water, and which was voided in ſmall quantities: She had not had a ſtool ſince the 6th, nor vomited for the laſt twenty hours. The tumour in the groin was more painful and diffuſed than thoſe generally ariſing ſimply from hernia; and on making a gentle preſſure upon it, its contents returned into the abdomen, leaving an unuſual fulneſs of the integuments.

An ounce of the common cathartic ſalts was diſſolved in ſix ounces of boiling water, and a table ſpoonful of this ſolution was ordered to be taken every hour, till the body ſhould be well opened: A cooling diet, ſuch as tea, coffee, with dry toaſt, and now and then a little thin chicken broth, was recommended; balm tea and barley water were ordered to be drank plentifully, and a ſupine poſture was alſo ſtrictly enjoined. The aq. veget. miner. was applied to the ſwelling; but it not only occaſioned moſt excruciating pain in the bowels, but even ſometimes vomiting.

9th. The medicine had operated three times, and was ordered, along with the lotion, to be diſcontinued; the hernia was apparently down, and was reduced as before, but the operation gave great pain; the integuments were ſlightly diſcoloured, and an evident fluctuation of matter was perceived.

By

By reaſon of theſe circumſtances, a bread and milk poultice was applied warm to the tumour every ſix hours, and warm water and ſweet oil were frequently injected into the rectum; the inflammatory ſymptoms continued increaſing, although ſhe perſpired to day for ſome time very freely, but without affording any mitigation of her pain; now become very acute in the bowels and lower part of the abdomen.

10th. She was extremely reſtleſs in the night, and had no ſleep, though ſhe took fifteen drops of tinct. opii every hour for three times; at noon this day her fever run very high, and the pain in the forementioned places was very acute and diſtreſſing; ſhe was ſeized with a moſt violent rigor, ſucceeded by great heat and perſpiration; diſcolouration and tenſion now extended over the whole right hypogaſtric region, and the tumour was daily increaſing in magnitude: the poultice was continued, but the glyſter omitted, as it ſeemed to afford no relief.

11th. She took no opiate laſt night, and reſted very indifferently, by reaſon of pain; the fever this morning ran very high, and the abſceſs had increaſed conſiderably, and on the top of which appeared a ſlight livid tinge. Ordered the glyſter to be again repeated, with the addition of a little Caſtor oil, as ſhe had not had a ſtool ſince the morning of the 9th; this, however, was objected to, but the treatment, in all other reſpects, was continued.

12th. Took twenty drops of tinct. opii at three ſeparate times laſt night, which procured two hours of diſturbed reſt, during which ſhe perſpired very freely. A veſicle now appeared on the apex of the tumour, with lividneſs to the extent of a ſhilling; her pulſe was quick, but ſmaller and more enfeebled, yet her thirſt conſiderable: the rigors and heats were more frequent, and leſs violent, and were ſucceeded by more partial perſpirations. Her pain was leſs immoderate, but yet conſiderable, and the diſtreſs in making water not much alleviated. Had yet had no ſtool, and ſtill objected to the adminiſtration of a glyſter.

Ordered two table ſpoons full of the *decoct. cort. Peruv.* every three hours, taking at the ſame time fifteen grains of the kali ppt. diſſolved in two ounces of water, and as much of the *acid vitriol. dilut.* as was ſufficient for ſaturating the ſame.

13th. Slept about two hours in the night without the aid of an opiate; but was attacked with a cold and hot fit this morning, ſimilar to the paroxyſm of a quartan ague; the ſhivering laſted upwards of an hour, and the ſucceeding heat and perſpiration were proportionally large: the pulſe was weak and very quick, being about 134 in a minute, and her ſtrength was conſiderably reduced, yet her ſpirits were tolerably good; the

the gangrene increaſed, though the pain was ſtill conſiderable. A ſuppoſitory of treacle, with the addition of a little butter and ſalt, was adminiſtered, which brought away a ſmall quantity of hardened fæces.

14th. Slept four hours laſt night without an anodyne, and the ſuppoſitory was again adminiſtered, with nearly the ſame effects as yeſterday: The febrile paroxyſm came on, obſerving nearly the ſame time and degree of violence as before; had partial and clammy ſweats during the intervals, notwithſtanding a conſiderable degree of arterial action ſtill exiſted. An ounce of compound tincture of bark was added to her decoction, and which was ordered to be taken as before. Four or five ſmall wine glaſſes of red Port were alſo ordered to be taken in the courſe of twenty-four hours, and a more nutritious diet was recommended, ſuch as good broths, or even animal food, if the ſtomach could take it. Lint dipped in equal parts of ol. terebinth. and *bals. capaivi* was applied to the gangrenous part, previous to the application of the poultice; now changed to one compoſed of oatmeal and briſk ale, with the addition of a little ſweet oil.

15th. Slept two or three hours laſt night, and in other reſpects appeared the ſame as yeſterday: the paroxyſm came on three hours earlier than the laſt, and was, in violence and duration, ſimilar to the preceding. Had a natural ſtool in the afternoon, and the gangrene appeared now ſtationary, and ſomewhat offenſive.

16th. The paroxyſm laſt night returned three quarters of an hour earlier, but in other reſpects ſimilar to the laſt: her pulſe were now ſtronger, and ſomewhat ſlower, and the intermediate and partial ſweatings more inconſiderable; had yet ſome pain, though far leſs immoderate than formerly; ſlept very little laſt night, but to day doſed a good deal: the gangrene was ſeparating, and the treatment continued as before.

17th. The acceſſion of the fit laſt night was an hour and a half earlier than, but in other reſpects nearly alike to, that immediately preceding it: the intermediate fever this day ran higher than uſual; the uſual ſuppoſitory was adminiſtered, but without effect. On removing the poultice this evening, ſome of the gangrenous part ſloughed off, which was followed by a quantity of putrid ſanies; after this, ruſhed out about ſeven or eight ounces of well concocted matter. The ſame treatment was, however, continued.

18th. Slept tolerably laſt night; and the feveriſh paroxyſm came on two hours and a half later than the laſt, and was leſs ſevere than any of the preceding. On removing the poultice this morning, a quantity of fæces was diſcovered; the ſame circumſtance

circumstance was again observed in the evening, together with a considerable discharge of matter.

19th. Slept three hours comfortably last night, and to day had some short intervals of repose: the paroxysm was earlier by a quarter of an hour than the last; ate some currant pudding and broth to dinner: In the evening, at dressing, had a large discharge of fæces and matter from the opening, and the whole of the mortified part this day sloughed off, leaving an ulcer four inches and a half in length, and nearly three inches in breadth, and which extended from below the *os pubis* upwards toward the spine of the *os ilium*. Dressed this evening with dry lint, and a plegdet of *ung. de sperm. ceti*; and the bark, along with a milk diet, was alone prescribed.

She henceforth gradually grew better, both with regard to the ulcer, and her health in general, till the 8th of August, when she again vomited a large quantity of chocolate coloured fluid, attended with pain in the bowels, and an exacerbation of her hectic symptoms, all which were relieved by an increased discharge from the ulcer. This evacuation in a day or two weakened her considerably; but by discontinuing the use of the bark, and taking the chalk mixture, it was checked.

Hence, to the time of her death, she was variously affected; sometimes ate well, was cheerful, and tolerably free from pain; and her hectic symptoms almost disappeared for four or five days, sometimes a week or ten days, or even longer, when she was suddenly seized with pain, and frequently swelling of the abdomen, increase of fever, and sometimes vomiting, though not so often as formerly; these were terminated by a large discharge of mostly a thin, acrid, and browniſh fluid from the ulcer.

The severe paroxysms which took place during the time that matter was pent up in the abscess, and which assumed the intermittent type, particularly when a change was effected in the tumour, and the system at large, are circumstances worth remarking, though doubtful whether affording any hint towards elucidating the nature of intermittents in general.

The discharge from the ulcer varied, not only in quantity but in colour and consistence; when the most profuse, it was thin, and chocolate coloured; and when less immoderate, assumed a more pus-like appearance. At all times, however, but more especially when copious, it was so acrid as to produce much excoriation on the contiguous parts: Cleanliness, and the application of saturnine preparations, with the forementioned dressings, were frequently and occasionally made use of. The fæces evacuated from the ulcer generally when unmixed with any other discharge, were whiter, and of a less consolidated consistence

consistence than those voided the natural way; and for some time subsequent to the rupture of the abscess, animal food was voided by the ulcer, apparently in a half digested state. The pain and swelling of the belly, accompanied with a spasmodic state of the abdominal muscles, were frequently distressing, and generally preceded a liquid and increased discharge from the ulcer; to obviate which, opiates occasionally were had recourse to.

Her pulse, from the 8th of July to the time of her death, was generally from 100 to 125; and as Nature sunk, it became small and contracted; insomuch, that six weeks previous to her death, it was scarcely distinguishable; notwithstanding, all this time she was perfectly rational, and strongly influenced for the last week with the idea of dying immediately, provided she were raised up from a supine to an erect posture. At her own pressing solicitation the experiment was made, and she died almost instantly.

Her tongue, at the beginning of the disorder, reckoning from the formation of the abscess, was generally furred, and somewhat yellowish, especially in the middle and back part of it; but in the latter stage, was clean, and of a raw appearance.

The urine, during the whole time, was mostly high coloured, and deposited a strong purulent sediment, with a lateritious tinge; sometimes, however, and especially towards the last, it was paler, with, and even without, a dark coloured nubicula.

About the middle of her sickness she had a troublesome cough, with some expectoration of *mucus*, and attended with some pains in the chest.

From the fourth day subsequent to the breaking of the abscess, she had evacuations *per anum*, sometimes every day, but oftener every second or third day. These, for the first month, or five weeks, were in a very trifling degree; but, either from the effects of oil and water gruel, daily thrown up into the *rectum*, or more probably from the efforts of Nature, an increased quantity of fæces was gradually obtained; always, however, bearing marks of having passed some strictured part of the intestine.

She often complained during her illness of pain in the inside of the thigh, knee, and leg of the side affected, all of which were considerably emaciated.

She menstruated in a small degree on the 18th of September, being the only time subsequent to the formation of the abscess in the groin; but previously she was regular.

For some time before her death, all the different excretions of the body were considerably diminished, and the fæces discharged

charged from the ulcer were in a liquid ſtate; but thoſe evacuated by the *anus* were generally of a hardened conſiſtence. The ulcer, from the firſt, healed very expeditiouſly; and long before her death was reduced to two ſmall openings, about half an inch aſunder, and little more than capable of admitting a moderate ſized garden pea.

On opening the body after death, which happened on the 28th of November, 1794, the meſenteric glands were the parts that chiefly exhibited marks of diſeaſe, eſpecially ſome that were ſituated behind the *duodenum*, and contiguous to the back; theſe were indurated, and contained a cheeſe-like ſubſtance, and a few of them were as large as a ſmall cheſnut. The reſt of the meſentery ſeemed diſeaſed; and that part connecting the inteſtines together was thickened, and ſo much ſhrivelled up, as to give the latter a very dilated appearance. In the meſentery of the loins, two or three inches below the right kidney, was found an abſceſs, containing about two ounces of thin purulent matter. The ſtomach and bowels exhibited no preternatural appearance, except the blood veſſels of the ſmaller inteſtines in particular were conſiderably enlarged. The liver and gall bladder were free from any marks of diſeaſe; but the membranous covering of the former was much thickened, and adhered firmly to the diaphragm: The ſpleen and pancreas alſo appeared ſound.

On examining the aperture in the groin, it was found that a portion of the inteſtine *ileum* adhered firmly to Poupart's ligament, and was puckered, thickened, and occupied about the ſpace of a large halfpenny. From this part iſſued two openings externally, the one above and the other below this ligament; the larger of theſe was little more than ſufficient to admit the introduction of a female catheter. The paſſage which led forwards to the under part of the inteſtinal canal was ſo narrow, that it was with ſome difficulty I paſt the firſt joint of my little finger through it: The peritonæum contiguous to this adheſion, for ſome diſtance, was extremely thickened, and even that portion of it in contact with the bladder, as well as the fundus of that viſcus, partook of this enlargement. The parts of generation were ſound, and the pſoas muſcle free from diſeaſe.

One inference to be drawn from this caſe, and which alone can recommend it for publication is, to warn us againſt ſuffering ſimilar abſceſſes to break of themſelves, as the conſequences are not only extreme pain and diſtreſs from the matter being pent up beneath a ſtrong aponeurotic and membranous covering, but a very conſiderable loſs of ſubſtance, with an increaſe of hectic, and a large aperture for the admiſſion of air

into the cavity of the abdomen already diſeaſed. Theſe evils might, in ſome meaſure, be obviated by a timely opening; for although no permanent advantage would accrue from it, yet the alleviation of pain and diſtreſs, and the probable proeraſtination of death, objects which probably would be the reſult, and which with the humane and rational ſurgeon are always *deſiderata* of moment.

In this kind of abſceſs, which is complicated with hernia, an apprehenſion may prevail againſt the uſe of the knife, which, if employed, muſt inevitably wound the hernial contents, (for there was little doubt here of the matter being confined within the inteſtine;) but could even an imprudent uſe of this inſtrument be productive of worſe conſequences than thoſe reſulting from ſpontaneous rupturing? As to the manner of opening theſe tumours, a large orifice ſeems inadmiſſible from the greater expoſure of the cavity of the abdomen to the external air; perhaps the moſt eligible method will be to thruſt an abſceſs lancet gently forwards, or if any doubt be entertained of the matter being confined within the inteſtine, diſſecting carefully through the external covering, till matter be found, may be the moſt adviſable. It may probably be found, that the moſt proper time for performing this operation is when the firſt ſymptoms of lividneſs appear; for I have generally obſerved, that a conſiderable degree of excitement, in the formation of abſceſſes, tends not only to expedite the cure, after their contents are evacuated, but has very ſalutary effects on the ſyſtem at large.

A Caſe of Tertian Intermittent, &c.

Sarah Priest, a young girl of fourteen years of age, and of an athletic conſtitution, and who had never menſtruated, was ſeized with the paroxyſm of a tertian ague, Jan. 14, 1795. The cold ſtage continued upwards of an hour, and was ſucceeded as uſual by a hot fit, which laſted rather more than two hours, and then ſubſided without any evacuation by the ſkin.

Jan. 16. The paroxyſm returned to day about the ſame time, but was ſomewhat longer in duration.

17th. To day being the firſt time of ſeeing her, I found her labouring under conſiderable fever, pulſe quick, tongue white and ſomewhat parched, ſome pain in the head and loins, and a diſpoſition to nauſea and coſtiveneſs; to remove which, fifteen grains of the pulv. ipecac. with one grain of the tartar emetic were given, which puked her ſeveral times. After this one drachm of *Fordyce's prophylactic powder* was ordered, which procured four ſtools. Eight grains of *nitre* with the ſame quantity

quantity of *white ſugar*, were next preſcribed to be taken every three hours, along with three table ſpoons full of the *ſaline mixture*, eight ounces of which contained four ſcruples of the *kali*, with as much lemon juice as was ſufficient to ſaturate the ſame.

18th. The fit came on four hours earlier than uſual, and was ſimilar to the laſt in point of violence and duration, but yet terminated by no perſpiration. In other reſpects ſhe was the ſame as before.

19th. Little alteration ſince yeſterday, the intermediate fever however appeared ſomewhat leſſened.

20th. The paroxyſm came on half an hour ſooner than the laſt, and was of equal ſeverity and duration, and yet unſucceeded by any diſcharge from the ſkin. As the intermediate and febrile ſymptoms were now conſiderably abated, the following was ordered:

℞. Pulv. cort. Peruv. ʒiij. Kali pp. ʒſs. Aq. nuc. moſch. ℥ſs. Aq. ſont. ℥vij. M.

Two table ſpoons full of this mixture were taken every three hours.

21ſt. Was better to day than ſhe hitherto had been during the intervals of the fits, being now pretty cool without thirſt or pain, and her appetite was conſiderably better.

22d. This day ſhe had no return of paroxyſm, and in all other reſpects ſeemed very well. Had diſcontinued her mixture laſt night, after having only taken eight ounces of it, and ſhe could not be perſuaded to take it afterwards.

24th. At or about the time of the laſt fit, which was in the night, the patient, according to her own account, was ſeized with pain in the head, uneaſineſs and oppreſſion at the ſtomach, conſiderable thirſt and heat, but without rigors; theſe, on abating, were ſucceeded by ſleep, and a hæmorrhage, as was ſuppoſed, from the mouth. Six hours afterwards petechiæ were diſcovered on the arms, ſhoulders, and upper part of the trunk, and even on the legs, but the ſpots on the laſt were ſmall and innumerable. On looking into the mouth, a number of petechiæ of a gangrenous aſpect appeared within the lips, on the inſide of the cheeks and fauces. Her pulſe was quick, but not weak, and ſhe had ſome thirſt, with liſtneſſneſs and proſtration of ſtrength. Had no ſickneſs or nauſea, and was regular as to ſtools, which exhibited no unnatural appearance. Bled none this day ſince ſhe awoke in the morning, but her ſaliva was now and then ſlightly tinged.

Ordered three large table ſpoons full of a ſtrong decoction of bark, ſix drachms of which were boiled down in twelve ounces of water to ſeven, and an ounce of the compound tincture

added to it, and along with which were taken twelve drops of the elix. *vitriol. acid.* Half a pint of red port wine made into *negus*, and acidulated with lemon-juice, was ordered to be taken in the courſe of the day; and a nouriſhing diet, ſuch as broths, jellies, &c. was alſo recommended.

25th. Bled in the night as before, but without being ſenſible of any previous indiſpoſition. As the hæmorrhage happened in her ſleep, neither its acceſſion, duration, or violence, could be aſcertained. In other reſpects ſhe was as the day before.

26th. Had bled largely as uſual from the mouth, in the night during ſleep. Her legs were now ſwelled, and livid, and the petechiæ were much increaſed, eſpecially on the face, ſhoulders, and breaſt. The ſpots within the mouth had alſo a more gangrenous aſpect, but the reſt of the mouth had an uncommonly pallid appearance. Her pulſe was about one hundred, and weak, and her thirſt was yet conſiderable, though her tongue was moiſt and clean. She was liſtleſs, low ſpirited, and free from pain, and was alſo regular as to ſtools, which were of a natural conſiſtence, but ſomewhat more than uſually offenſive, and dark coloured.

The ſtrength of her mixture was increaſed from ſix drachms of the bark to one ounce, the ſame quantity of the decoction to be taken as before, along with fifteen drops of the elixir, inſtead of twelve. Her wine was alſo ordered to be increaſed to a pint a day.

27th. Much the ſame as yeſterday, and had bled as uſual in the night, whilſt aſleep Inſtead of the compound tincture of bark, an ounce of the tincture of *catechu* was added. Milk and rice were now taken along with her former diet.

28th. Bled as uſual laſt night, and complained of great ſtiffneſs in her hams and knees, and her legs were much ſwelled, and more livid and œdematous. The petechiæ were more univerſal, and her breath offenſive. She complained of ſome ſickneſs, and was greatly dejected. She was delirious the fore part of the night, but afterwards ſlept tolerably. Inſtead of the vitriolic, twelve drops of the muriatic acid were preſcribed to be taken in the ſame manner as the former; and in the intervals of taking her medicine, lemon-juice in different vehicles was plentifully drunk.

29th. This day ſhe went a few yards out of doors, and on her return was ſeized with rigors, and conſiderable pain in the back and lower extremities, eſpecially the right leg, which now, in addition to lividneſs, put on ſymptoms of inflammation, and was greatly ſwelled. Two or three large *vibices* appeared in different parts of the body, one of which ſurrounded the right

right eye, and occupied the ſpace of the *orbicularis* muſcle. Her pulſe was increaſed to one hundred and ſix, yet her thirſt much the ſame; her petechiæ however bore rather a more favourable aſpect, and ſhe bled only about half the uſual quantity in the night.

30th. Better in all reſpects, as the pain in the loins and legs had vaniſhed; and the appearances of the latter, with regard to the colour and ſwelling, much more favourable. The petechiæ alſo were changing from a livid to a chocolate colour, and her pulſe came down to ninety, and her urine was turbid and ſimilar to new beer mixed with yeaſt. Had no hæmorrhage laſt night, and has been without ſtool for the two laſt days; but on ordering the *tinct. catechu* to be omitted, ſhe had a motion the ſame evening. Her appetite now increaſed, and the ſame plan was ordered to be purſued.

31ſt. She continued in all reſpects to recover. The petechiæ were either daily diſcerſing or becoming freſher, and the ſwelling of her legs was conſiderably reduced, and the lividneſs had nearly diſappeared, notwithſtanding which ſhe bled a few drops in the night. Her pulſe was now at eighty-ſeven, and as ſhe complained of being tired of her medicines, the doſes were not only leſſened to two table ſpoons full of the mixture, and eight drops of the acid, but ordered to be taken only three or four times a day. Theſe ſhe could only be perſuaded to take two or three days further, but her pint of wine ſhe daily continued taking a week longer.

On the 5th of February, ſcarcely a veſtige of petechiæ was diſcernible, and ſhe had been free from any further attacks of hæmorrhage, and in all other reſpects appeared well. She henceforth rapidly regained her former health, which ſhe has continued to enjoy to the preſent time.

This girl, previous to this complaint, had always enjoyed an uninterrupted ſtate of health from her infancy, and had been accuſtomed to a good deal of bodily exerciſe, eſpecially within doors. Her diet had uſually conſiſted of milk, and ſometimes malt liquor as a ſubſtitute, farinaceous, and occaſionally animal food, partly freſh and partly ſalted. Though apparently of a ſound conſtitution, and without any external mark of ſcrophula, yet her parents were deeply tainted with that diſorder.

After the firſt and ſecond attack of hæmorrhage, ſome proper attendants were appointed to obſerve the time of acceſſion, and every other circumſtance, with regard to any ſubſequent bleeding that might enſue. The reſult of theſe obſervations were, that the third attack came on at two o'clock in the morning, after the patient had been unremittingly aſleep for four hours,

hours, and although, previouſly, ſhe had been ſomewhat reſtleſs, with apparently increaſed heat and flushing of the face, yet when the bleeding came on ſhe appeared comfortable, ſtill, and laid on her ſide. After bleeding about five and thirty minutes, *per ſtillicidium*,* ſhe awoke, and then it ceaſed. The fourth attack came on half an hour later than the preceding, and was uſhered in by leſs reſtleſſneſs and apparent heat. After bleeding nearly forty minutes it ceaſed, and ſhe continued ſleeping forwards for an hour, and then awoke and fell aſleep a ſecond time, but without having any further return of the hæmorrhage. On the fifth night, ſhe was awoke at two o'clock, and kept from falling aſleep again till half paſt three; and then yielding to the power of ſleep, ten minutes afterwards the hæmorrhage returned, without any previous indications, and was more profuſe than before, but of ſhorter duration, as it only continued about twenty-eight minutes, though the ſaliva for ſeveral hours afterwards was ſlightly tinged. With reſpect to the ſixth attack of hæmorrhage, from the careleſſneſs of the attendants no proper account can be given.

From a number of collated circumſtances, attendant both on the two firſt and ſubſequent hæmorrhages, I am of opinion that they returned at nearly regular periods; for notwithſtanding on the fifth morning, the bleeding was later in its return, yet probably its procraſtination was lengthened by keeping her awake beyond the former periods of attack, for, about an hour previous to its acceſſion, it was with ſome difficulty ſhe was kept from ſleeping. This circumſtance joined to the conſideration of the hæmorrhage always commencing during ſleep, may in ſome meaſure account for its procraſtination on the fifth morning.

The urine throughout her diſorder was changeable, both in quantity and appearance. During the firſt and intermittent ſtage, it was in large quantity and of a natural colour, eſpecially after the paroxyſm, and depoſited a ſmall ſediment, partly flocculent and partly purulent; but during the intervals, was ſomewhat higher coloured, and generally without ſediment. In the latter ſtage it was generally paler than natural, and the ſettlement largely and ſolely flocculent. On the 30th, the day after catching cold, the urine however put on a conſiderable change, ſuch as is deſcribed in the narrative of that day.

She

* The quantity of blood loſt could not be aſcertained. I ſuppoſed about an ounce and a half at a time, therefore the bleeding muſt have been very ſlow.

She never appeared to have any rigors from the cure of the intermittent fever to the 29th, being the day of catching cold, nor any increaſed heats in that interval, except thoſe already deſcribed as uſhering in the hæmorrhage; and as to perſpiration, not the leaſt was perceptible during her illneſs, but on the contrary the ſkin always felt hot and dry.

The weather, for ſeveral months prior to the firſt acceſſion of this complaint, had been exceedingly changeable. In the autumn there was much rain, which continued into December; to this ſucceeded alternate froſts and thaws, with almoſt daily changes of the wind. A ſevere ſtorm of froſt and ſnow, at length ſet in the beginning of January, and with the exception of one or two intermiſſions of ſlight thaws, continued to the commencement of her diſorder.

Newſolme, the place of her reſidence, is a ſmall village ſituated rather in a mountainous part of the country, on the middle of a declivity of conſiderable extent. It is expoſed much to the north and north-weſt winds, and I have thought its inhabitants unuſually ſubject to feveriſh complaints; and beſides, I once met with another caſe of tertian in this place, which was a girl of about the ſame age and temperament, and who had never menſtruated. The diſorder was idiopathic, and unattended with any anomalous ſymptoms. The paroxyſms returned at equal intervals, and were terminated by copious perſpiration, and eaſily gave way to the bark.

During a practice of almoſt twenty years in this town and neighbourhood, I never ſaw an intermittent as a primary affection, a native of the place, excepting theſe two caſes; yet, notwithſtanding this, many people formerly, who were in the yearly habit of repairing to the eaſtern part of this county as reapers, imported this diſorder on their return, and which generally continued with them throughout the winter, but either left them ſpontaneouſly on the return of warm weather, or eaſily yielded to the bark. Latterly, however, this complaint is far leſs frequently imported than formerly, a circumſtance ariſing either from the harveſts being ſomewhat earlier, or what is more probable, the country being more cleared and better drained.

A great proportion of theſe intermittents were tertian, and the unhappy ſufferers labouring under them generally were taking divers remedies or noſtrums throughout the winter, and at the ſame time imprudently expoſing themſelves to the cold. For inſtance, the bark they would take for three or four days, till imagining themſelves well, they then would generally diſcontinue its uſe, and conſequently incur a relapſe, againſt which this remedy, or ſome other, was again had recourſe to, with

with usually no better success than before. Thus were those unhappy people harassed throughout the winter; and even on the return of warm weather, were with more difficulty cured than those whose complaint had continued uninterruptedly throughout the winter, and for which no remedies had been taken; and besides, I have thought that affections of the liver, dropsies, &c. were more apt to succeed to the former class of patients than the latter.

[To be continued.]

A Case of Synocha, communicated by Mr. James Moore, *Surgeon.*

SYNOCHA, or pure inflammatory fever, is a disease so rare in this country, that many experienced practitioners have doubted its existence. I think the following Case, which I lately attended, is unquestionably an example of it.

J. H. is thirty-one years of age, he is a tall stout man, of a florid complexion, and of a full sanguine habit. From a particular cause, he has for above a year laboured under a depression of spirits, and unfortunately he was lately terrified to a great degree. As his mind continued in a state of alarm, there is reason to believe that this was the remote cause of the fever which ensued.

The industrious Hoffman, in enumerating the causes of fevers, mentions, first, "vehementes animi commotiones, terror imprimis et ira."

This young man, though harassed by these terrible passions, endeavoured to suppress all appearance of them; and as he was in the country, and did not complain when he first felt himself indisposed, I cannot with certainty fix the first day of the fever. Indeed, this in many cases is impossible, the beginning of diseases being often imperceptible.

However, according to the best conjecture I can make, the fever commenced October 29th, when he perceived a chilliness all over his body: But for several days before he was unwell, and had fallen off in his appetite.

The second day of the fever, sickness occurred, though not in such a degree as to excite vomiting, and in the night he broke out into a profuse perspiration.

The third day, the perspiration continuing, he kept his bed, and complained of head-ach. An opening medicine was given him.

The

The fourth morning he was better, and ſat up in the day; but grew worſe towards the evening. He ſtarted from bed during the night, and was kept in a continual ſtate of terror, from believing he ſaw frightful apparitions.

The fifth day he dreſſed himſelf, got upon horſe-back, and rode to town, which was a diſtance of twelve miles. He complained very little, but was thought to be in a ſtrange ſtate.

The ſixth day I was conſulted. I found him up, and when I inquired how he was, he told me he had only a pain in his forehead. His face was redder than uſual, and his eyes were ſlightly inflamed. The expreſſion of his countenance denoted ſurpriſe; and the anſwers to the queſtions I put to him, marked a confuſion of intellect.

His pulſe was ſtrong, hard, and beat 88 ſtrokes in a minute. The ſkin was hot, the tongue was moiſt and whitiſh, the urine red, with a dark ſediment; the bowels regular.

He was put to bed, and as the delirium augmented, it was found neceſſary to guard him carefully.

The diſeaſe increaſed, though with occaſional remiſſions, for four days: His pulſe was always ſtrong and regular, and once was perceived as high as 96; his ſkin felt hot, and rather moiſt; he was diſpoſed to conſtipation, was thirſty, and ſhewed no nauſea or want of appetite, but ſwallowed readily whatever was given him.

On the tenth day he was quite furious, and could hardly be kept in bed, though ſtrapped down, and reſtrained by two ſtrong men. That night a profuſe ſweat broke out, and he became tranquil.

The eleventh day I found him perſpiring freely. His pulſe was ſoftened, and diminiſhed in frequency, and his anſwers were rational.

This proved the criſis of the fever; for, on the twelfth morning, his pulſe had ſunk to 80, and his only complaint was weakneſs.

The treatment employed during the five days he was under my charge, conſiſted ſimply of two purgatives, and a draught containing one-fourth of a grain of tartar emetic, and two drams of the aqua ammoniæ acetatæ, which was exhibited regularly every ſix hours.

This, I imagine, contributed to excite the critical perſpiration.

I did not venture on bleeding, becauſe it was the ſixth day of the fever before I ſaw him.

His diet conſiſted of liquids, ſlightly nutritious.

The definition of Synocha given by Dr. Cullen, is "Calor plurimum auctus, pulſus frequens, validus et durus; urina rubra ſenſorii functiones parum turbatæ."

This caſe differed in the laſt characteriſtic; but as Dr. Cullen acknowledged that he never ſaw the diſeaſe, he may have erred in the deſcription.

It is alſo probable, that the mental derangement in this inſtance was much greater than uſual.

This caſe was ſo ſtrongly marked, that there could be little danger, without groſs inattention, of miſtaking it for a fever of the typhoid kind.

The loſs of ſtrength was ſo ſlight, that the patient rode twelve miles on the fifth day, without appearing fatigued, or going to bed afterwards: And when the diſeaſe left him altogether, the debility was much leſs than what occurs after fevers in general.

The natural functions were little diſturbed: His thirſt was not exceſſive; and he took whatever was allowed him without diſguſt.

The pulſe was ſtrong and hard, the ſkin hot and ſoft; every one of which particulars is the reverſe of what occurs in Typhus.

And the tongue, inſtead of having a dry, red, brown, or black appearance, was always moiſt, and rather white.

As moſt of the functions of the body were ſo little diſordered, delirium was unexpected.

It commenced ſo early as the fourth night, and continued till the criſis with augmenting violence. Perhaps the moral cauſes, which it is believed, operated in exciting the diſeaſe, contributed to this effect.

The indications in this fever are very oppoſite from thoſe of Typhus, it is therefore of the utmoſt importance that they ſhould be diſcriminated.

Synocha certainly very much reſembles the ſymptomatic fever attendant upon phlegmon; and therefore, it has not unnaturally been termed the inflammatory fever.

The common ephemera is undoubtedly of the ſame ſpecies, which, notwithſtanding its name, often continues three days:

And the Synocha ſeems to me preciſely the ſame malady, in a more violent degree, and running on for a longer period.

As many caſes ſimilar to the above have been narrated by authors, it appears ſtrange that the reality of this diſeaſe ſhould be now queſtioned.

But the attempt to ſimplify diſeaſes, and particularly fevers, has, I think, been carried to an erroneous length.

The

The ſpecies that are common in any country, are perhaps not numerous; but it is clear, from the various accounts we receive, that fevers have different ſymptoms, and require a different treatment in every part of the globe.

This iſland ſeems moſt fortunate in this particular; for in no country, however our climate is decried, are fevers ſo mild and ſo little dangerous. Among the poor, who are lodged in confined apartments, and who are too frequently neglected, it is true that fatal caſes are common.

But among thoſe who are comfortably lodged, and who have the means of obtaining early and proper aſſiſtance, except where the conſtitution is naturally bad, or is worn out with old age, fevers are rarely mortal.

Groſvenor Street,
Jan. 3, 1801.

JAMES MOORE.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IF you think the following caſe worthy inſerting in your moſt valuable Journal, it is at your ſervice. I am, &c.

Perth, Jan. 19, 1801. G. M'LAREN, Surgeon.

In June laſt I was aſked to viſit Mary Aitken, æt. 50, who lived about three miles from this town, and who, I was told, had been ill for upwards of two years, and had for the laſt ſix months been confined to her bed. I found her affected with violent hyſteria; ſhe was of the ſanguine habit, and robuſt conſtitution: She had taken a number of medicines commonly uſed in that diſeaſe, but had experienced no relief. I ordered her three doſes of muſk, one of ſix, another of ſeven, and a third of nine grains, to be taken the three following mornings, beginning with the ſmalleſt. Every morning, about half an hour after ſhe had taken the powder, a violent paroxyſm of the diſeaſe came on, throwing the body into various convulſive motions, and which having continued for near three quarters of an hour, ſhe became quiet, and a copious perſpiration was produced over the whole body. I ſaw her again the day after ſhe had uſed the three powders, when ſhe found herſelf greatly relieved, but complained of being very weak; however, by

the administration of a few tonics, she found herself so well in twelve days from the time I first saw her, that she walked into town, and has had no return of her complaint.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

WHEN the application of any new remedy is recommended to the Public, it may be considered as a duty incumbent on every member of the Faculty, to make known any facts he is acquainted with, whether for or against it. Having seen the application of the spt. terebinth. in cases of Burns and Scalds recommended by some of your ingenious correspondents in different Numbers of this Work, I have, for the above reason, taken this method of submitting to your opinion, the effects which I have observed ensue from its use in a variety of cases of the above kind. The practice is, I believe, by some, considered new; but it is certainly by no means entirely so, for it has been known and used many years in the neighbourhood of some of our manufacturing towns, where the nature of the trade is such, as to render the workmen particularly liable to injuries by fire. At least, I am authorised to say, this is the case with respect to Birmingham, Wolverhampton, and Dudley, from residing nearly seven years in the vicinity of these towns, where the common people are so well acquainted with the good consequences following its early application, that it is commonly, and almost constantly, kept in their work-shops. During the above period, which was from 1791 to 1798, I had opportunities of seeing above 120 cases of injuries by the excessive application of heat, different in degrees of severity; in above 100 of which, the spt. terebinth. was always applied, whenever surgical assistance was called in during the period that it could be deemed useful. The hint of its utility was first derived from the lower class of mechanics, who, as I have before observed, had been long in the habit of using it. I am extremely sorry it is out of my power to lay any of these cases before the public; from having left that part of the country in the year last mentioned, and having been since for the most part employed out of the kingdom, I am entirely unfurnished with the names and exact dates;—this will, I hope, be considered as a sufficient excuse, as no practical conclusions can be deduced from the recital of cases, unless their authenticity and

and accuracy can be depended upon in every particular. The following, however, are the general effects which I have commonly obſerved from its uſe:

That, if applied immediately, or ſoon after the injury is ſuſtained, the excruciating pain is always alleviated, and often removed; the period in which this happens, is generally in proportion to its early or late application.

That its beneficial effects are moſt evident in thoſe caſes where the injury penetrates no deeper than the cutis; and it is generally obſerved, the moſt violent degrees of pain and irritation happen in ſuch inſtances. Conſequently, it will be found commonly leſs uſeful in burns than in ſcalds.

That it will, notwithſtanding, be found of the greateſt ſervice in burns, even of the ſevereſt kind, in which the chief pain is always found at the junction of the injured and ſound parts; where, by allaying the irritation, it often prevents violent degrees of inflammation in the adjacent parts, and thus forwards the ſeparation of the eſchar.

That its utility in ſuperficial injuries appears to be by preventing effuſion and conſequent ulceration; and in ſuch caſes, its beneficial application may be limited to within twenty-four hours after the injury is received; but in ſeverer caſes it may be uſefully applied, until ſuch time as ſloughing commences, and ſuppuration is eſtabliſhed.

The mode of its application is the next conſideration.—It may be applied alone by means of a feather, or large camel-hair bruſh; or cloths thoroughly wetted with it, may be applied over the affected parts: But though, in this way, it acts quickly in removing pain after the irritation immediately ſubſequent to its application is over, I am inclined to think its ſalutary effects are not ſo permanent as when mixed with an equal quantity of fine olive oil. Fine rags dipt in this liniment, and applied doubly, form a ſoft and eaſy dreſſing, which may, for the moſt part, be removed without pain, and appear to retain their influence ſeveral hours; whereas, when uſed by itſelf, it ſoon evaporates, and the rags become ſtiff, dry, and a cauſe of irritation; or when mixed with linſeed oil, as is the practice with ſome, after lying on a ſhort time, they adhere ſo faſt as in their removal frequently to tear away the ſkin, and thus effectually fruſtrate the chief curative intention. The repetition may be every ſix hours, or as often as the parts affected become very painful. That opiates are uſefully ſubjoined, I need not mention.

In every topical affection it will be allowed, the prevention or removal of pain is a principal ſtep towards cure; this is of particular moment in extenſive burns or ſcalds ſituate on the regions

regions of the ſtomach or abdomen, where exceſſive irritation is likely to extend the inflammation to ſome of the neighbouring viſcera, and thus deſtroy life; and in far the greateſt number of accidents of the above nature, which happened to children from upſetting tea-pots, or their cloaths catching fire, theſe parts and the throat have ſuffered moſt; at leaſt, this has happened in moſt of thoſe I have happened to be engaged in; but it was, probably, accidental, and may not in general be the caſe.

In the year 1797, I had an opportunity of ſeeing three caſes of ſcalds treated by the application of cold, though not perſonally concerned in their treatment; they all happened from boiling wort, and the ſubjects were healthy unmarried women, all under 25 years of age. Two happened at the ſame time, and were treated by the immediate application of cold cataplaſms of ſcraped potatoes, renewed as often as they became temperate; one was above the right ancle, and the other on the left inſtep: Though the injuries were by no means ſevere, and the applications immediate, extenſive ulceration ſucceeded in both caſes. The third was on the metatarſus, extending from the toes to the inſtep. Immediately on being ſcalded, ſhe plunged her foot into a pail of cold water, where ſhe kept it nearly half an hour; the ſimple liniment (ex ol. oliv. et aq. calcis) was afterwards applied; but notwithſtanding the attentive care of an eminent ſurgeon, extenſive ſloughing and ulceration enſued; nor was ſhe perfectly cured till near three months afterwards, during which time the bark, tonics, and opiates were found neceſſary. I cannot poſitively aſſert that the application of the ſpt. terebinth. would have prevented the diſagreeable conſequences in theſe three caſes; but were I to draw concluſions from ſimilar caſes, I ſhould be induced to think it would.

I hope it will not be conſidered, that the above ſketch is by any means meant as a deciſion in favour of the new practice; I have merely narrated the effects I have obſerved, with the opinion deduced from ſuch obſervations; and as I truſt, by means of your valuable Journal, the affair will ſhortly be decided by ſome of your eminent correſpondents, whoſe extenſive practice affords them numerous opportunities of making experiments, and from whoſe abilities and integrity we have every reaſon to hope for the moſt juſt and candid concluſions; when this happens, if I find that I have been too haſty in forming my opinion on the ſpt. terebinth. it will give me pleaſure to adopt that which may be more conducive to the promotion of the healing art and the good of mankind. I am, &c.

Spithead, Jan. 25, 1801. NAVALIS, jun.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

ON the 25th of November I was desired to visit the child of Mrs. Browne, late in the evening, of which child I had delivered her on the 31st of the preceding month. Upon examining the child, who by its violent shrieks and writhing of the body seemed to be in excruciating pain, the appearances were as follow: A violent inflammation appeared, extending longitudinally from the upper surface of the right breast to the umbilicus; and laterally from the inferior angle of the scapula over the ribs to the inferior portion of the left breast. To trace its circumference, we will commence from the inferior angle of the right scapula passing nearly to the axilla, enveloping almost the whole of the right breast, descending to the scrobic. cordis, then ascending as high as the nipple of the left breast, then suddenly descending in a strait line to a parallel with the umbilicus, passed close upon its upper surface, declining a little on the right side, then gradually diminishing in its ascent to the inferior angle of the scapula.

Upon making inquiry about her previous health, the mother stated to me, that the infant when she retired to rest the preceding evening was in apparent good health; which it had enjoyed from the birth. In the night she was waked by its crying, and immediately applied it to the breast, which it eagerly embraced, and as speedily relinquished; it continued crying till morning, when she undressed it, to examine whether any external injury was the cause, having previously supposed it to be an affection of the bowels. On removing the cloaths she observed both breasts turgid, milk oozing from the nipples, and the right breast much inflamed; these appearances induced her to apply a common poultice, which not affording the desired relief, she sent to me. On my arrival, I found the appearances as I have just stated.

I desired linen cloths to be dipped in Aq. lytharg. acet. comp. applied to the inflamed parts, and kept constantly wet; evacuated the intestines with a little rhubarb and calomel, and gave two drops of tinct. opii every hour during the night. The following day the saturnine lotion was continued with one drop of Tinct. opii every two hours. The inflammation did not materially abate, but became circumscribed to the limits before mentioned.

On the 27th the abdomen became much distended and very tense. I directed the intestines to be again evacuated by infusum sennæ, giving a tea spoonful every quarter of an hour until

til it ſhould operate freely, and the abdomen to be fomented frequently afterwards, anointing it with ung. ſaturninum.—Theſe remedies afforded the child relief for about two hours, the fomentation and ointment uniformly producing the ſame effect when repeated.

The 28th, obſerving a fluctuation under the inflamed integuments, I directed a ſoft poultice to be applied, and gave the infant ʒſs decoct. cinch. with two drops of tinct. opii three times a day, which it ſwallowed with ſome difficulty. The following day, Nov. 29, the abſceſs broke immediately over the ſcrobic. cordis, when not leſs than four ounces of pus were evacuated. The infant continued the medicines during this day, but on the following (Nov. 30.) declined even the breaſts, which it returned to a little the day after, but refuſed wine and every other ſupport.

The wound now put on a formidable appearance, and I fully expected the infant would have ſunk with exhauſtion. A carrot poultice was applied and repeated frequently for the three following days, when a large portion of the integuments ſloughed off, and left part of the ribs and ſternum expoſed, excepting their muſcular covering. From this time the child had more frequent recourſe to the breaſt, ſwallowed a little red wine, and took the bark as before, and has continued to improve in health ever ſince; the bark however affecting the bowels, was obliged to be omitted. I dreſſed the inner ſurface with yellow digeſtive, covering the whole with a pledget of cerat. epulot. I ſhould mention, that an abſceſs had alſo formed under the inferior angle of the ſcapula, and evacuated itſelf by the aperture over the ſternum. By turning the child with the face downwards, the integuments have adhered to the muſcles beneath, from that part to the right breaſt, the abſceſs being firſt completely evacuated.

The wound is at this time, Jan. 4, nearly cicatrized, and the child perfectly well.

I have juſt ſtated the foregoing caſe, to ſhow how much injury a child a month old is able to ſuſtain. The inflammation was undoubtedly the cauſe of the following miſchief; but to what exciting cauſe is this inflammation, ſo extenſive in its limits and ſo rapid in its progreſs, to be referred?

Is it to be attributed to the abundant ſecretion of milk in the breaſts producing diſtention?

I am, &c.

M. F. WAGSTAFFE.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

I Received the following caſe from my friend Mr. Humphrey, of Shrewſbury; if inſerted in the Medical Journal, it will afford much ſatisfaction to Your moſt humble ſervant,

No. 51, Strand, Dec. 17, 1800. THOS. JONES.

Caſe of Mr. William Windſor, of Bettesfield, in the pariſh of Harweir, and county of Flint, a farmer's ſon, ten years of age.

ABOUT four years ago the cornea of the left eye appeared flat, and of a green colour, with the entire loſs of ſight; but continued free from pain until laſt Chriſtmas, when the colour became black, and the eye preſerved its former ſhape, but became very painful. About Whitſuntide there appeared a ſmall opening in the cornea, through which was diſcharged a tea ſpoonful of bloody matter; and in the courſe of a fortnight after, a fungus began to appear through the aperture, which grew very ſlowly for ſome time, being kept down by the eye-lids; in the beginning of Auguſt it had grown beyond the eye-lids, and was increaſing very faſt; at the latter end of which month he came to Shrewſbury, where I firſt ſaw him with my partner Mr. Sandford, and we agreed to remove it; but were obliged to poſtpone the operation until Sept. 19, at which time it was increaſed to double the ſize it was when I firſt ſaw him, and began to be ſloughy in the middle, attended with bleeding every time it was dreſſed. From the increaſed ſize of it he was in conſtant pain except when lying upon his back, as it covered the whole of the cheek. I paſſed the knife between the noſe and the tumor, as it extended too far over the cheek to allow me to get at the root without wounding the eye-lids on the other ſide; the hæmorrhage from it was not ſo great as we expected, and was ſtopped by preſſure alone. He became eaſy in a ſhort time after the operation, and has continued ſo ſince, without any unpleaſant ſymptom. He was always greatly diſpoſed to drowſineſs, and has a large head. Upon examining the tumor, the excreſcence appeared to grow from the retina, which was become a pulpy maſs, filling the whole cavity of the eye. The tumor weighed ℥vſs. and was ſo reflected over the eye as to preſs upon the orbit, and completely envelope the eye, which was forced out of its ſocket, and the muſcles put upon the ſtretch ſo much as to

increaſe their thickneſs, although their action continued. The optic nerve (which was divided) was perfectly ſound, the tunica albuginea preſerved its healthy ſtate, although the cornea was diſeaſed to its edge. The part was entirely healed by the 11th of October, when he left Shrewſbury perfectly well, and has continued ſo ever ſince.

I regret not having procured a drawing of it, and I never ſaw any caſe ſimilar, except in Heiſter's Surgery; and I had no idea of publiſhing it for ſome time after the operation.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

AMONG the various diſeaſes which afflict our ſpecies, I think there is one which has not ſufficiently occupied the attention of medical practitioners; I mean that of ſwelled legs. It is preſumed that this diſeaſe may ſubſiſt where the viſcera are ſound. It is not an unfrequent complaint with men advancing in years, and it is alſo a diſorder which ſometimes affects young men of libidinous habits, evidently proceeding from mere relaxation. It is therefore ſubmitted for the conſideration of our ſurgeons, if it might not be uſeful in obſtinate caſes, to render more general the practice of bandages, or of iſſues, or ſome other more effectual kind of drain, for the diſcharge of the water, and for the prevention of a future accumulation. The writer, although not a practitioner, yet having been deſigned and educated for the profeſſion, he is fully aware of the uſual objections in ſuch caſes. He does not think that iſſues, or any ſimilar plan for diſcharging the water, would produce mortification. In an incipient ſtate of the diſeaſe, there is commonly ſufficient vigour remaining in the conſtitution to reſiſt that tendency; and that vigour would be in a great degree preſerved, by preventing the tone of the part from being injured by diſtention. It ſhould alſo be conſidered, that where the viſcera are ſound, the water is not always in a very abundant quantity; but in a quantity ſufficient to ſhorten the lives of many; and not only to ſhorten, but by producing an oppreſſion upon the ſtomach, and other unpleaſant feelings, to render their lives very uncomfortable: Whereas, could this accumulation of fluid by any means be obviated, ſuch perſons might enjoy many years of happineſs and eaſe.

London, Dec. 17. 1802. F. KYNION.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IT muſt prove ſatisfactory to the friends of humanity, to hear of the extenſion of the Vaccine inoculation to this diſtant quarter: But I am ſorry to add, that it is not likely ſoon to be generally adopted, and that fears are entertained of its falling into diſuſe the moment I depart.

Although at the head of thoſe I have inoculated, ſtands the ſon and heir of his Majeſty's Ambaſſador Extraordinary; although he and four others, on whom the inoculation has ſucceeded, have gone through the different ſtages of the diſeaſe in the mildeſt manner poſſible; and although the natural ſmall-pox is at preſent committing mighty ravages in a neighbouring village, ſtill no impreſſion can be made on the ſtupid and torpid race of men who conſtitute the motley population of this capital. Abandoned to indolence, their whole life is little better than a vegetable exiſtence; and they are neither to be rouſed from their lethargy by the force of reaſon, nor the fear of danger.

But perhaps I am ill adapted for a medical miſſionary; I can neither court, nor fawn, nor flatter; nor can I bring myſelf to reliſh the greater number of Greek, or even Frank ſocieties, where the converſation is, for the moſt part, as inſipid as the prevailing manners are mean and loathſome.

To make amends for the uncourtly reception the *vaccinia* has experienced in this place, I have lately tranſmitted, by an overland conveyance, a piece of rag, impregnated therewith, to one of my friends at Bombay; and a ſimilar one to Mr. Werry, Engliſh Conſul at Smyrna, who propoſes immediately inoculating one of his own children.

The firſt matter with which I attempted to inoculate Lord Bruce, was contained on a thread which I applied to a ſmall ſcratch made with the point of a lancet; but no inflammation of any kind enſued. After an interval of eight days, the operation was repeated on both arms; but ſtill the attempt failed. At laſt, we received matter in conſiderable quantity, on a rag, with which charging a lancet, I was enabled to perform ſucceſsful inoculation. The failure of the two firſt attempts was leſs owing, I apprehend, to the nature of the virus contained on the thread, which was no older than that which afterwards ſucceeded, and was collected and forwarded from Vienna by the ſame reſpectable gentleman, Dr. Del Carro, than to the

difficulty of applying and retaining a ſmall and fine bit of thread over a very ſlight ſcratch.

Reflecting on what had happened, I propoſed that the third experiment ſhould be made by previouſly applying a veſicatory of the ſize of a ſmall pea, and on dividing the raiſed cuticle, applying to the naked fibre a ſmall morſel of impregnated rag; "for it is poſſible," ſaid I, "that by the matter adhering too firmly, or too ſlenderly, to the point of the lancet, it may be either detained behind, at the lip of the orifice, or the requiſite ſeparation not enſue." But parental fondneſs over-ruled my reaſoning, and I was obliged to perform the operation in the uſual way. I endeavoured, however, by introducing the lancet obliquely, retaining it a few ſeconds in the wound, and preſſing on the part with my thumb as I withdrew it, to inſure ſucceſs. Succeſs followed, but I did not conceive myſelf warranted to diſmiſs my fears; and accordingly, in the inoculation of two other children, I employed on one arm the mode by inciſion, and on the other, that by veſication. In both ways the diſeaſe was communicated; but with this difference, that the local inflammation took place in the veſicated arm on the fourth day, while the inciſed one ſuffered no change till the ninth. As was predicted, from a knowledge of the general law of the diſeaſe, there was only one conſtitutional affection, and in both caſes it accompanied the inflammation of the veſicated arm. Of five other children whom I inoculated at nearly the ſame time, by inciſion, only one received the diſeaſe. One of the remaining four I have ſince ſucceſsfully inoculated by veſication; but to a ſecond attempt, in either way, the parents of the others will not at preſent ſubmit.

My practice in this diſeaſe has at no time been extenſive; but my obſervation has not been, on that account, leſs accurate, and I feel no heſitation in recommending inoculation by a veſicatory, in preference to that by inciſion; the one being often liable to fail, while the other is in its nature almoſt infallible. In the former manner, I have been ſince informed, the Greeks ſometimes inoculate for the ſmall-pox. The principal objection that can be made againſt it, is the fear of its being attended with greater pain to the patient; but if an infant's pain is to be meaſured by its cries, that proceeding from inciſion is much the greateſt, while the generated diſeaſe does not riſe higher in the one caſe than in the other. So much for Cow-pox.

In a communication, which ſome weeks ago I did myſelf the honour to ſend you, I hinted my deſign of inveſtigating plague. I am at preſent, for this purpoſe, ſoliciting admiſ-

ſion,

ſion into the Peſt Hoſpital, ſupported by the contributions of the Franks at Smyrna; but its manager, a reverend friar, named Luigi, for reaſons inſcrutable to every one, perſiſts in what ſeems to me a narrow-minded, cruel, and unchriſtian denial. Should I find no ſop for this Cerberus, I will go from him to his conſtituents. I cannot believe they will be equally illiberal; but if in this reſpect I am likewiſe diſappointed, I ſhall endeavour to hold them up to that univerſal reprobation they will in ſuch caſe ſo eminently deſerve. In the mean time, I continue to believe that the plague is in no inſtance either a contagious or incurable diſeaſe. If I ſucceed in eſtabliſhing thoſe propoſitions, the world will, I truſt, rejoice in my ſucceſs. If I fail, the matter will be no worſe than at preſent. An enquiry, conducted in the manner I propoſe, will in all probability elicit ſome truths, which, for want of obſervers only, remain hitherto concealed.

To conclude, I pledge myſelf to two things; firſt, to make a near and perſonal obſervation of plague, in defiance of every obſtacle that may occur; and in the ſecond, if I ſurvive the enquiry, to make an accurate and faithful report of every obſerved ſymptom, and of the effect of every preſcribed remedy. However much attached to my preſent opinions, I ſhall haſten to recant them, the moment I diſcover them erroneous. All I aſk of the public, is to hear me with patience, and to judge of me with candour.

Entertaining ſentiments of reſpect for your valuable Publication, I have the honour to be, &c.

Pera of Conſtantinople, Dec. 7, 1800. D. WHYTE.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

A GIRL, fourteen years old, was ſuddenly ſeized with ſuch violent ſpaſms about the larynx, the ſides of the cheſt, and the diaphragm, that it was feared ſhe would ſoon expire. So quick was the recurrence of thoſe ſpaſms, that ſhe could neither eat nor drink. She complained of a ball aſcending from the ſtomach into the throat, and there exciting the ſpaſms.

Her breathing was difficult, ſhort, and attended with a hiſſing.

Her countenance was flushed.

Her

Her eyes were ſwollen; and the tunica conjunctiva was ſomewhat inflamed.

Her languor and diſinclination to move were extreme. She had an averſion to food of all ſorts, and even to drink.

Her body was rather coſtive.

She ſpat a mucus of a bluiſh green colour, which taſted, ſhe ſaid, very diſagreeably: But ſhe could not be made to compare the taſte to any other. The ſpitting was ſomewhat profuſe.

She never ſlept for many days and nights; and there was alſo a ſlight cough.

I ordered an enema, gave her Kali ſaturated with lemon juice, and the camphor mixture, with T. Fœtida, and applied a large bliſter to the pit of the ſtomach.

Theſe medicines procured no relief. I then gave pills, with camphor and opium, and applied a plaſter of opiate confection to the larynx. All ſeemed in vain, the girl grew weaker and weaker, and death ſeemed to approach by rapid ſtrides.

I then requeſted the opinion of Dr. Vaughan on ſo ſingular a caſe, whoſe attention to the poor girl merits my warmeſt thanks.

As there was once an inclination to vomit, it was encouraged; but without any good effect. To obviate coſtiveneſs, induced by the opium, the powder of ſcammony, with calomel, was given; and forty drops of tincture of opium after its operation. Every enquiry as to the riſe of the diſeaſe, was made of the girl and her friends; but for a long time nothing to direct us could be detected in their anſwers.

At length, conſidering particularly the mucus diſcharged ſo conſtantly, the girl was aſked, if ſhe could recollect having ſwallowed any thing uncommon?—To which ſhe anſwered; that ſix months ago, as nearly as ſhe could gueſs, ſhe ſwallowed two pins: But ſhe did not think them the cauſe of her complaint, as ſhe had never felt any pain or inconvenience from them.—She added further, that ſhe was certain they had paſſed from her by ſtool, as ſhe had felt them pricking the anus.

It was concluded, that the green mucus owed its green colour to the pins, and that they, or one of them, had not been voided.

A vomit was by conſequence given again; and, ſtrange to tell, the two pins were diſcharged by the mouth: Corroded indeed, but in the proper form, and only bent to almoſt a right angle.

Should the above relation of ſo ſingular a circumſtance merit a place in the Medical and Phyſical Journal, the inſertion will oblige

Your's, &c.

Rochſter, Dec. 17, 1800. WILLIAM ADAMS.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IF the following Obſervations on the Tongue and its Diſeaſes are thought worthy a place in your truly valuable Publication, by inſerting them you will oblige your moſt obedient humble ſervant,

Aberdeen, Jan. 14, 1801. ANDREW FERGUSON.

The tongue is one of thoſe organs of the human body which is but very ſeldom affected with diſeaſes; and when they do occur, they ſeem to ariſe from ſomething of an infectious nature.

In my practice I have met with three different kinds of ulcerations upon the tongue, called aphtha, ſibbenic, and mercurial ulcers; theſe, I conſider as its moſt frequent morbid affections. Aphtha is a diſeaſe moſt commonly ſeizing children when they are very young; it is conſidered as one of the genus of the order exanthemata, accompanied with ſynochus fever, and little whitiſh ulcers, which are ſometimes diſtinct, at other times running together, ſpreading over the tongue and ſurface of the mouth, attended with pain, and ſlight ſwelling of the tongue; when the ſloughs are removed they ſoon grow again: the time of its going off is variable.

This is the definition of aphtha, and ſerves very well for diſtinguiſhing it; about its cauſes, however, there are various opinions entertained. Although ſeveral of the order of exanthemata are contagious, yet this diſeaſe is not mentioned as ſuch; it is, however, ſaid to be attended with ſynochus; and as moſt of the fevers of this ſpecies are contagious, if we reaſon from analogy, we muſt ſuſpect aphtha of being ſo too. I ſuppoſe that aphtha is rather at firſt a local affection, which has ſomething of a poiſonous ſtimulating nature attached to it, proceeding from a certain morbid condition of the glands of the mammæ: This ſtimulating ichor, iſſuing from the morbid glands, and mixing with the milk, I conſider as the cauſe of this ulceration of the child's tongue. Aphtha does not occur to every child, neither do I ſuppoſe ſuch a morbid ſtate common to the glands of every woman: In the firſt milk of every nurſe, there is ſomething of a ſtimulating nature, which acts upon the child as a cathartic. May not this ſtimulating quality be increaſed ſometimes, ſo as to occaſion this diſeaſe? I have obſerved before, that aphtha is at firſt of a local nature,

but

but when it happens to be violent, it is attended with fever, and universal affection: It descends by the primæ viæ, occasioning violent gripes, diarrhœa, and very often convulsions. This disease always infects the woman's nipples, producing sores very painful and difficult to heal, and which never will heal as long as the aphtha continues in the child's mouth. Are those who have been affected with aphtha, exempted from, or less liable to be affected with, the small-pox? I ask this question, because, having inoculated a daughter of Mr. Davidson, butcher, in this place, who was violently affected with aphtha when very young, she did not take the infection. Some time after, when I was inoculating four children of Mr. Alexander Sangster, a relation of Mr. D. Mrs. Davidson desired that I should, a second time, attempt to inoculate her daughter. The first time, her arm became inflamed a little, and a small pustule appeared; the second, as a larger wound was made, and a greater quantity of variolous matter introduced, the pustule was large, and attended with inflammation around; yet no eruption appeared upon the rest of her body: the other children who were inoculated with the same matter, had a good many very fine and distinct small-pox. Sibbenic ulcers proceed from a poison similar to syphilis, and are only a modification of it; the same agents which cure the one, cure the other. I have noticed this difference, however, that mercury has a more powerful effect in curing sibbens than syphilis; this I suppose to be owing to the difference of the stages of the complaint. I have observed, that in the first stage of syphilis, mercury in general has but very little effect until the poison begins to exert its influence upon the lymphatic system, and has suffered some change in the body. The sibbenic ulcers have a very different appearance from aphtha; they have a broader surface, appear principally upon the sides of the tongue; their surface is whitish, but their edges are swelled, and they look very much like cancerous sores: Nothing has so great an effect in removing these sores, as the topical application of muriated mercury, along with the agency of the mercurial pill. Mercurial ulcers are occasioned by mercury, applied either inwardly or outwardly; they want the cancerous appearance of the sibbenic ulcers; have a darker coloured surface in the mouth, and are attended with a disagreeable fœtid breath, and a taste resembling that of copper; unless when they are combined with the syphilitic poison, they require very little medicine, except the frequent application of emollient gargles, to which may be added, a small quantity of the sulphuret of potash.

The tongue is less liable to be affected with inflammation than any of the other organs of the human body, and yet it is more

more expoſed than any of them to the action of ſtimuli, both of the ſolid and fluid kind; this muſt be owing to the ſtructure of its external covering, which ſeems to be peculiar to itſelf. The internal ſubſtance of the tongue is compoſed of ſeveral muſcles, called genio-gloſſus, cerato-gloſſus, ſtylo-gloſſus, and lingualis; the fibres of which are diſpoſed in a longitudinal tranſverſe, and vertical manner; they enable the tongue to move in all directions, which is important in the operation of ſuction, maſtication, deglutition, and the articulation of the voice: A defect of the muſcles of the tongue produces paraphonia, and ſeveral of the ſpecies of pſelliſmus. One of the principal uſes of the tongue is, to afford the ſenſe of taſte; for this purpoſe it is covered with numerous papillæ, which, from their appearance, have been diſtinguiſhed by the names of capitatæ, ſemi-lenticulares, and villoſæ; theſe have a communication with the nerves of the tongue: The capitatæ appear principally upon the baſis of the tongue. I have known more than half a dozen of theſe in ſeveral perſon's tongues to be enlarged to the ſize of ſmall peas, without their being even ſenſible of it; the great variety of taſtes is occaſioned by the action of the ſtimulus of our food, &c. on the papillæ. Some animals, owing to the particular ſtructure of theſe, have the ſenſe of taſte more acutely than the human ſpecies. When the papillæ are diſeaſed, or hurt by the repeated action of violent ſtimuli and narcotics, (ſuch as opium and tobacco) their ſenſibility is much diminiſhed, and the taſte impaired. In peripneumony and catarrh, I have obſerved that the ſenſe of taſte is very much impaired; and when this is the caſe, I have found it to be a very good ſign.

In every univerſal diſeaſe, I make it a common rule to cauſe the patient to ſhow me his tongue, and inquire concerning his ſenſe of taſte; this I conſider to be very material, when preſcribing, as ſometimes his acuteneſs of taſte might prevent him from taking certain very efficacious remedies, which often prove more diſagreeable to the tongue than to the ſtomach. Inability to thruſt out the tongue, and loſs of taſte, have been conſidered as prognoſtic ſigns, indicating great debility and danger: Theſe moſt readily occur in the latter ſtages of typhus. In the beginning of fever, when the debility of the functions is not ſo extreme as in the after ſtages, we often perceive a tremor of the tongue, when it is thruſt out: We can form very little idea of the ſtate of the ſtomach from the appearance of the tongue. What we term a *fur* upon the tongue, is not a certain ſign that the ſtomach is foul. I agree with Dr. Domier in this particular. We often find the tongue foul when the digeſtion is good, and *vice versa*. Some perſons

have this *fur* upon their tongues at all times, even from the apex to the base; others have very clean tongues, who are much troubled with dyspepsia. I am acquainted with a person whose tongue is full of hacks and deep furrows, which intersect it in all directions, and a very deep one in the course of the linea linguæ mediana: His tongue is seldom white or foul, but appears of a bright red colour, and he has no other complaint excepting a few rotten teeth.

In no universal disease is the tongue so much affected as in fevers, especially when they are long protracted, or attended with putrid symptoms. In typhus and its varieties, from the very beginning the tongue is *furred*. As the fever advances, it turns to an ash-coloured crust, which afterwards changes to a brown. The same appearance of the tongue accompanies several other diseases, such as cynanche maligna, tonsillaris, parotidœa, and scarlatina anginosa. In all diseases where there is great debility, attended with putrescency, the tongue is most affected with *fur*. The cause of this appearance must be debility, and a relaxed state of the surface of the tongue and throat, from a deficiency of excitement; for I have frequently observed, that those who are of a florid colour, and healthy appearance, have generally the surface of their tongue of a redder colour, and cleaner than those who are weakly and pale. The tongue is always of a more beautiful colour at its extremity than its base; and when crust, or *fur*, of any kind appears, the greatest quantity is always at the root of the tongue, where there is generally the least motion. In the morning, after the tongue has been at rest all night, it always looks foulest: Nothing serves the purpose of cleaning it so well as its action in mastication, and frequent speaking, which promotes the circulation of the saliva, and removes every collection of foulness that gathers in the mouth. If this should be found ineffectual, recourse may be had to tonic gargles, as the best means of removing *fur*, and preserving a vigorous state of the papillæ. The tongue, at its anterior and under part, has a ligamentous band, called frænum, formed of a reduplication of the membrane that lines the inside of the mouth; this seems for fixing and preventing it from making too much motion. When the frænum happens to be too near the extremity of the tongue, so that it becomes fixed to that degree that the child cannot put it out, or use it, then the disease, known by the name of *tongue-tied*, takes place. There may be several degrees of this; that which requires manual assistance does not so often occur as is generally imagined, and many times the operation is performed by midwifes when there is no real necessity for it.

To

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

TWO years have elapſed ſince I publiſhed a ſhort account of a caſe of Cancer then under treatment, in which the ſolution of white arſenic appeared to have acted as an *anodyne*. That caſe, as might be expected, proved fatal, but the remedy did not diſappoint my prediction. I have now a ſecond patient under a courſe of the ſame remedy, where my expectations reſpecting it have been fully realized. The ſubject is a woman, in the fifty-third year of her age, whoſe left breaſt, adherent to the pectoral muſcle, and in a cancerous ſtate, together with a large cluſter of indurated glands in the axilla, I extirpated in March laſt. The integuments covering a part of the breaſt had become diſeaſed, ſo that union by the firſt intention could not be accompliſhed. Nevertheleſs, the parts healed completely, and for ſeveral weeks ſhe continued apparently well. The return of the diſeaſe was then manifeſted by a ſmall veſication, which terminated in a painful ulcer, about the ſize of her finger nail, in the middle of the cicatrix formed by the operation, and by painful indurations ſurrounding it, and in the courſe of the abſorbents leading to the axilla on the ſame ſide. With the diſeaſe ſlowly advancing, ſhe ſuffered for ſeveral weeks longer before ſhe applied again for help, when ſhe complained of pain all over the ulcerated ſurface, and particularly in the knots, eſpecially when preſſed.

She had been forewarned of the probable recurrence of the diſeaſe, owing to the too long delay of the operation, which was performed with proper regard to every circumſtance of candour and caution.

On the 14th of July, when I firſt put her upon the uſe of the mineral ſolution, the ulceration was extending itſelf rapidly, and the pain all over the ſurface of the ulcer was conſtant and very ſevere, as well as in the indurated parts. She had not taken it more than nine days, in doſes of twelve drops, three times a day, before ſhe thought the pain ſenſibly decreaſed. To the ulcer itſelf, the ung. ceræ cum opio was directed; but as, after a ſufficient trial, ſhe thought the pain aggravated by it, the infus. cicutæ was ſubſtituted, as in the former caſe.

It is now upwards of ſix months ſince ſhe began the uſe of the arſenical ſolution, which has been taken in the above doſes with great regularity till within a few days. This ſuſpenſion of it has been recommended on account of a pain in the head, and of an uneaſineſs in her ſtomach, both of which ſhe aſcribes

to a monthly constitutional change now not outwardly marked; and as they had nearly subsided this morning, I am inclined to favour her opinion of the cause. Notwithstanding the ulcerated parts had so long ceased to be painful, the cicatrization was not much advanced till she came into the Infirmary, where she was a second time admitted an in-patient, under the cancer-plan, on the 12th of January, 1801.

There is now very little ulceration, and the skinning is still progressively advancing; the pain too, which is not constant, is confined to the knots, some of which are inflamed, and going to exfoliate. In Graham's case it will be recollected, that this was the source of pain, after she had for some time taken the arsenical solution.

I have purposely compressed the recital of this case, and confined myself to the leading points of it; but it must be again observed, that the ulceration was considerable, and very painful.

The drops were at first taken in a little water, but, on account of their seeming to disagree with her stomach, it was changed for pepper-mint-water, which at that time had the desired effect. Latterly, she has been allowed four ounces of red wine daily; in other respects, she has taken only the common diet of the house.

No opium has been administered, though, when the functions of the stomach were disturbed, I thought it indicated, lest its exhibition should throw any ambiguity over the result; however, I am disposed to think that it may become necessary, to enable her to bear the mineral solution in proper doses. Henceforward, I shall not scruple to employ it, should the symptoms require its use, in conjunction with the drops. And should chronic general inflammation, which has been said to attend the long continued exhibition of arsenic, be excited, but which I have not seen, the digitalis offers a resource admirably calculated to repress it.

These are the several means by which, in the present instance, I propose to combat this formidable disease.

Partial success has already attended my endeavours, and I expect not to accomplish a cure. Among the multiplicity of nostrums for cancer, vaunted by empirics, arsenic is probably the active ingredient; it was formerly much employed, but had, I believe, been discarded from regular practice. My own experience proves it to be safe, when cautiously administered; for I have given it, in another disease, to a child of fifteen months old, and with success.

Your judicious readers will form their own conclusions from my *two* cases: My own are;—

1. That

1. That arſenic does diminiſh pain, and promote the healing of an ulcerated cancer;

2. That it may be ſafely adminiſtered, in proper doſes, for a great length of time, without endangering life, or even exciting any of thoſe alarming ſymptoms which have been ſaid to attend its continued exhibition.

This brief notice you will oblige me by laying before the public, from whom, conſiſtently with my own feelings for the ſufferings of thoſe who may be afflicted with Cancer, I could not any longer withhold it.

I have the honour to be, &c.

Mancheſter, 7th Feb. 1801. W. SIMMONS.

A Caſe, which proves the Advantage of bringing on premature Labour in a diſtorted Patient.

THE publication of Mr. Barlow's caſes on "a mode of practice which has been ſucceſsfully adopted, in caſes of diſtortion of the pelvis in pregnant women," has met with that attention from the public, which, from its importance to the intereſts of mankind, might have been expected. At the time of publiſhing, his own practice would have furniſhed him with more caſes in point; but, I believe, he thought thoſe ſufficient to prove the propriety of employing the means which he has recommended. There can be no objection, however, to have it confirmed by the experience of others; and this is done moſt ſatisfactorily by the following caſe, that was tranſmitted to me this morning by Mr. Hardman, a reſpectable ſurgeon at Bolton, where Mr. Barlow reſides.

To Mr. SIMMONS, Surgeon, at Mancheſter,

Dear Sir,

During the abſence of our friend, Mr. Barlow, I at different times attended ſeveral of his patients for him, whoſe caſes he has publiſhed; and was by thoſe convinced of the utility of bringing on premature labour in diſtorted patients. The caſe I am about to deſcribe, is the firſt that has occurred on my own account; with the reſult of which, I flatter myſelf, you would wiſh to be informed, as it clearly proves to me, that this mode of exciting delivery ſuperſedes all cruel operations.

Three

Three weeks ago, the wife of James Biddy, then in the ſeventh month of her pregnancy, requeſted my aſſiſtance: She had lain-in at Ormſkirk five years before, when ſhe was delivered of a dead child, after being in labour for ſeven days and nights. The gentleman who attended her, admoniſhed her to have ſomething done before the full time, ſhould ſhe again prove with child; this, I ſuppoſe, alluded to the bringing on of premature labour, becauſe he further declared, that a full grown fœtus could not be born alive, and that ſhe would run great riſk of her own life.

I called the morning after ſhe applied to me, and ruptured the membranes, and left her ſomething to take, agreeably to the cuſtom of Mr. Barlow. The pains did not come on till the night but one following, when, after being in ſtrong labour about three hours, the child was born footling. The pelvis was very narrow; yet, I verily believe the child would have been ſaved, but for the powerful contraction of the uterus round its head; the mother recovered very well. I am, &c.

Bolton la Moor, Feb. 6, 1801. E. HARDMAN.

P. S. Since I wrote to Mr. Simmons, Mr. White, ſurgeon, of Mancheſter, informed Mr. Barlow he received a letter from a medical gentleman in Yorkſhire, wherein he informs him that he attended a lady who never could have a child born alive; but, peruſing Mr. Barlow's caſes, he brought on premature labour in the ſeventh month, and the child is living and heir to a conſiderable eſtate.

Reply to Mr. Syer.

In your laſt Number, (No. xxiv. vol. v. p. 170) a gentleman of the name of Syer has done me the honour to publiſh ſome Remarks on a paper of mine, which was inſerted in a former Number of your Journal, and contained an account of a caſe of Monſtroſity that had recently occurred to me. Whether my reaſoning be juſt or not, or my opinions well or ill founded, your readers muſt determine; but as Mr. S. appears to have been actuated by laudable motives, I ſhall, in this inſtance, ſay a few words in reply. And,

1. I muſt requeſt Mr. S. to re-peruſe the paper upon which he has beſtowed his comments, and he will diſcover, that in deſcribing the appearances, he has miſtated my words, no doubt unintentionally; but the miſtake would have been avoided by tranſcribing the paſſage.

2. He objects to my firſt poſition drawn from that caſe, namely,

namely, "that nervous influence is not at all neceſſary to the growth of the fœtus in utero;" which, he ſays, "is anſwered by the *universal* exiſtence of a brain and nerves in the fœtus;" and yet he admits, at the concluſion of the ſame ſentence, that that caſe furniſhes "a ſolitary exception."

3. He likewiſe objects to my other poſition, which is, "that the fœtus in utero does not poſſeſs ſenſation;" and ſtates, that this "is not leſs liable to animadverſion" than the former. I had certainly to learn, that a concluſion upon a point of phyſiology, drawn with every appearance of ſincerity, even if erroneous, could be deſerving of cenſure. I confeſs it has ever appeared to me, both more ſafe and more philoſophical to deduce directly from appearances, though the interference may not accord with a pre-conceived theory, than to object on hypothetical grounds, becauſe "Nature appears to have intended."

There was no veſtige of optic nerve. The recurrents were not traced.

I ſhall be very glad to ſhow the preparation to Mr. Syer, ſhould he come this way.

W. S.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IN the following caſe of Fracture of the Cranium are ſome unuſual circumſtances; and I think ſome uſeful practical concluſions may be drawn therefrom. But it appears to me to militate againſt our ſuppoſed theories of injuries of the head, and to prove how inadequate they are to explain the phyſiology and pathology of the brain. I am, &c.

His Majeſty's Ship Spencer, at Sea, Jan. 3, 1800.

G. BELLAMY, Surgeon.

William Kirk, a ſeaman, aged about 40, on the 14th October, 1797, received by a fall from his hammock (his head ſtriking againſt the winch of the pump) a fracture of the external table, (it muſt be remembered I ſpeak ſo far as the injury was diſcovered at the time) and through the diploe of the left parietal bone.—Symptoms of debility, but none of compreſſion.—I made a free inciſion down to the pericranium on each ſide of the wound,

wound, (which was lacerated and much bruiſed) to dilate it, and remove the tenſion and inflammation ſo uſually attendant on partial diviſion of the ſcalp, particularly when inflicted by a blunt weapon; whereby I was alſo better able to trace the extent of the fracture. Though the accident happened on the 14th, at night, he did not complain till the 15th.—Simple dreſſings were applied, and in the evening I gave him opii gr. ij. vin. lbſs. and lemonade, ad libit.—16th, Gave him vin. lbſs. ter de die; at night, oil antim. c. opio.—17th, No ſymptoms of compreſſion but of debility. Rep. ut antea.—18th, Vin. lbij. de die, and renewed the dreſſings. The appearance of the wound very tolerable; no detached puffineſs of the ſcalp or pericranum; but a ſecond ſmall wound near the other has alſo the bone bare.—19th, Repet.—20th, Ut antea; is doing well; is dreſſed every other day.—21ſt, Wine, &c.—22, Wine and opium; takes mutton broth and other food, having had no fever, and complaining of nothing but weakneſs.—23d, Ut antea.—24th, Continues his ſoup, wine and opium, occaſionally; and his bowels have been pretty regular; have been once aſſiſted by a cathartic, (in the form of pills) as he threw off a ſaline purge.—25th and 26th, R. U. A.—27th, The wound is healing faſt, and particularly healthy; he has not had one ſerious ſymptom ſince the injury; therefore hope no affection of the brain, eſpecially as the ſmaller wound is entirely healed; has had no vomitings, delirium or fever, alteration of the countenance or eye, nor pulſe otherwiſe than natural; complains only of a ſhooting pain through the head, particularly at the forehead, with a ſenſe of tremor paſſing through the head, and towards the neck, and ſome pain in the back, (likely from the blow when he fell); but all theſe ſymptoms have leſſened daily, and he has recovered ſpirits and appetite.—28th, U. A. Was informed late this night of his having expreſſed many incoherencies; a more than uſual deſire of drink, and other marks of delirium. I immediately drew my opinion of what had taken place, and far without having expected it; dreading, though my hopes were ſanguine, that inſidious approach of ſecondary inflammation of the brain, which often takes place weeks after the patient has every appearance of doing well. When I ſaw him in the morning I found his pulſe accelerated, and full; delirium; rather muttering than otherwiſe; complained of a ſenſe of corded tightneſs round his head; his countenance and eyes rather turgid; in ſhort, I concluded, without doubt, that all my hopes of primary recovery were vaniſhed, and that now the brain was oppreſſed; be it either from extravaſation, (at the time of the accident, now beginning to irritate by corroſion the dura matter) or blood poured out ſince, and acting as compreſſion; or as inflammation communicated

from

from the ſcalp, and through the other coverings by the connection of parts to the membranes of the brain; but not from the leaſt poſſible idea of what was really the caſe, (which will be related); however, decidedly, the operation of the trepan was pointed out for the relief of the oppreſſed organ. For which purpoſe, on the 29th, in the morning, I took him on ſhore to Almada Hoſpital, near Liſbon. I would have wiſhed to perform the operation on board, but the numerous inconveniencies to which a patient with a dangerous wound is there expoſed need not be told; and after all (ſuffering from noiſe, and the want of many comforts) I muſt finally have removed him, when it could have been done with ſafety; but before which time he would have been endangered by various cauſes, which his immediate removal was intended to prevent. The fracture was about two inches long, lengthways of the bone, and towards the angle formed by the ſagittal and lambdoid ſutures. Mr. Grey, ſurgeon of the hoſpital, and myſelf, decided on what ſhould be done. Firſt, to make a free inciſion of the ſcalp, to examine the bone; (indeed, I could not convince him by the accurate obſervations I made at the time of the accident, that there was no evident depreſſion) that done, and examining the fracture, which admitted the head of the probe, and in one direction, paſſing it between the two tables poſteriorly, and rather obliquely inwards; opened a ſuſpicion of the internal table being depreſſed, (though this free paſſage of the probe might be from the caries of the bone, and from the expected exfoliation with which I had hopes all would have finiſhed well); but no ſymptom was excited by this probing of the wound; no ſenſe of vomiting or pain, however rudely preſſed:--However, there were ſuch ſymptoms, the only chance of relieving which was the uſe of the trephine; the immediate application of which I recommended to temporizing with, or to alleviating ſymptoms of inflammation by bleeding; particularly obſerving the time ſince the accident had happened, and debility gradually induced by laying in bed, a ſpare diet, &c. and as now, indeed, he was much more compoſed, and with every mark of oppreſſion; ſo that there were but two things to be done; either by ſuppoſing the delirium that had taken place to be accidental, in part the effect of the opium, and the impreſſion made on his mind laſt night by violent thunder and lightning, of which he was even whilſt in delirium mindful; and there are none of us but muſt know the ſympathy from the leaſt injury approaching the brain to external cauſes ſuch as thoſe; I ſay, by ſuppoſing theſe ſymptoms to be occaſional, and now diſappearing, either to go on with the treatment hitherto obſerved, and inſtead of evacuants to ſupport him by cordials under the debility with which he was oppreſſed; or elſe to trepan immediate-

ly, to remove whatever exciting cauſe might be found. The latter was determined on, knowing the frequency of ſuch deceitful caſes by which we are often unexpectedly deprived of a patient; and that the ſymptoms were but too clearly marked of that ſecondary affection of the brain, which ſhows itſelf in the ſlow approach of diſeaſe. Mr. Grey did not think depreſſion unlikely. I rather thought extravaſation, or formation of matter;—indeed, I cannot conceive how a piece of bone ſhall for a fortnight lay preſſing on the brain, without cauſing any one ſerious ſymptom, and then act (I ſuppoſe) merely as an irritant ſubſtance bringing on inflammation, &c.; for it could not be by depreſſion only; elſe, why did not ſymptoms of compreſſion appear before? It would ſhew us, that compreſſion of itſelf was nothing, but only as it induced diſorganization of the brain by inflammation as a foreign body, which it may do ſooner or later according to the violence of the blow, the particular bearing of the oppreſſive body, and prediſpoſing cauſes. That ſuch is the caſe, the following inſtance will ſhow; and the trueſt concluſion I can make therefrom, is, that without waiting for ſymptoms, compreſſion of whatever kind muſt be removed whenever the ſeat thereof is pointed out.

A crucial inciſion was made, the pericranium removed, and a perforation made on the outer ſide of the fracture, juſt ſo as to take in the circle of the ſame. On removal the dura matter was found turgid, with blood veſſels oppreſſed; a grumous dark appearance like to a ſlight extravaſation, but the whole of the circle deſcribed by the trephine did not come away entire; that part of the upper table neareſt the fracture remaining in a ſplinter-like manner, rather looſe and depreſſed. Now was ſeen the nature of the injury, which was a depreſſion of the inner table, (independent of the outer) with a conſiderable extent of ſplintered detachment, more or leſs, (but not quite removed from the external table, and only by force of the bone nippers ſeparated one from the other) for the ſpace of one inch in the direction of the fracture. This piece could not be removed without a ſecond perforation, which was accordingly made on the outer ſide of the fracture (the apparent direction of the ſplintered piece). The circle being removed, and the two perforations being now as one, the whole detached piece was with *difficulty* removed, becauſe it had its ſtricteſt connection under thoſe ſides of the perforations which preſented the angles; that is, in the direction of the fracture, particularly anteriorly; whence a large ſcale was with force withdrawn, as indeed was the whole, not only by the permanent ſituation it ſeemed to have procured, (being very tight on the dura matter) but alſo from a particular inſtance of, no doubt, increaſed compreſſion, by an addition of

oſſeous

offeous matter, which had been generated from the diploe of the depreſſed piece, and grown up againſt the outer table; by which reſiſtance was added, and at the ſame time the deceit of feeling with the probe, which went ſeemingly no lower than the uſual depth of the deploe;—depreſſion ſtill exiſting. Great caution was neceſſary in removing the pieces, fearing to hurt the membranes. The bone had either carried down with it ſome blood, (or it had there accumulated) a membranous-like attachment, which we feared, when forced by pulling away the bone, to be the dura matter. Had the ſecond perforation been made in the direction of the fracture, the depreſſed pieces would have been more eaſily removed; and this ſhould always be done, unleſs where otherwiſe pointed out. Being ſatisfied ſo far as prudence could determine of having removed all oppreſſion, the flaps were laid down, and ſuperficially dreſſed only; not being decided on what might ſtill be neceſſary. An enema was adminiſtered, the laxative ordered laſt night not having operated. I conſider this to be a ſingular and intereſting caſe. Nothing particular happened after the operation, and the man was ſoon perfectly cured.

To the Editors of the Medical and Phyſical Journal.

"Segnius irritant animos demiſſa per aures
Quam quæ ſunt oculis ſubjecta fidelibus." HOR.

GENTLEMEN,

AFTER the many learned diſquiſitions and numerous inſtances already advanced by eminent profeſſors in favour of the Digitalis Purpurea, the obſervations I am about to adduce may appear trifling and inſignificant; but I conceive it behoves every practitioner to contribute his information, however ſmall, to the general fund of knowledge, eſpecially if it may tend to the deciſion of a queſtion ſo important as the efficacy or inefficacy of a remedy, in a diſeaſe by whoſe ravages thouſands of our natives are annually ſacrificed. A diſeaſe which, in our variable climate, deſtroys the bloſſoms of our youth, precipitates into an untimely grave the darling hopes of many worthy families, and perpetually adds to the number of the widows and fatherleſs.—I have at preſent an opportunity of ſtating a ſingle inſtance only of its effects in phthiſis pulmonalis, which I hope will not be rejected on account of its being ſolitary, as I do not communi-

cate it with a view of prejudicing the public in favour of a new remedy; but, unactuated by a love of novelty, I would recommend it to ſerious examination and attention, that every practitioner may, on the evidence of his own experience, reject or approve the uſe of the Fox-glove in a diſeaſe demanding ſuch earneſt conſideration as that of pulmonary conſumption.

I ſhall proceed to a ſtatement of my caſe, which I ſhall endeavour to tranſcribe with impartiality, and as much accuracy as I am capable of; being pre-determined, on my firſt exhibition of the Digitalis, to make known its effects, whether its adminiſtration was attended with ſucceſs or otherwiſe.

In November laſt I was required to attend on Thomas Lane, a cloth-worker, reſiding in this town, aged 27 years; he was pre-diſpoſed to phthiſis both from *forma corporis* and temperament. I found him in the purulent ſtage of that diſorder. He had hectic fever with marked exacerbations; expectoration copious and *evidently purulent*, profuſe nightly perſpirations, acute pain in the ſide, inceſſant cough, diſturbed ſleep, and conſiderable dyſpnœa, accompanying great emaciation and debility. The bowels, tongue, and ſkin were natural, the appetite very much impaired, and pulſe 120. I learned from his account that ſome months before, a watry eruption (I ſuppoſe eryſipelatous) attended with great heat and inflammation, appeared in many parts of his body, but was more particularly confined to his face, neck, and breaſt. Whilſt in this condition he was imprudent enough to aſſiſt in drawing a fiſh-pond, and immediately cauſed a retropulſion of the eruption, from which time he dates the commencement of the ſymptoms before enumerated.— Nov. 29, Began the uſe of the ſaturated tincture; pulſe 119. ℞. Tinct. Fol. Digital. gt. xv. ex cyatho lactis ter in die.—30th, Had ſlept rather better, the cough was leſs troubleſome, and the expectoration ſomewhat diminiſhed, night ſweat rather leſs profuſe, appetite bad, bowels, tongue and ſkin natural, pulſe 104. In the morning an eruption reſembling nettle-raſh appeared over the whole ſurface of the body, which entirely receded before noon.—Dec. 1, A bad night, watchfulneſs in the early part being occaſioned by a griping pain in the bowels, with diarrhœa, which terminated towards morning, when he enjoyed undiſturbed repoſe for ſome hours; night ſweat trifling. In the morning an eryſipelatous eruption appeared in every part of the body; ſkin hot and dry. The tongue a little furred, very little pain in the ſide, cough and expectoration (to uſe his own expreſſion) not half ſo frequent. In the forenoon he complained of ſlight nauſea and vertigo; the appetite bad; pulſe 94.—Cont. Dos. As he complained of much thirſt, I ordered him a cooling beverage with Tart. Cryſtall. and Fruct. Tamarind.—2d, ſlept

better,

better, vomited towards morning, no night ſweat, bowels ſoluble, tongue furred, ſkin hot and dry; the eruption has partly diſappeared. Complains of ſlight pain in the hypochondriac and hypogaſtric regions; trifling vertigo; cough and expectoration the ſame as on the preceding day; appetite bad; pulſe 73. Ordered him to omit one doſe of his mixture.—3d, Slept conſiderably better; does not complain of nauſea or vertigo; no nightly perſpiration; bowels laxative, tongue and ſkin healthy. The eruption has entirely diſappeared; pain in the ſide trifling; cough more frequent, and expectoration increaſed; appetite much better; pulſe 85.—Aug. Dos. ad gt. xx.—4th, Had neglected one doſe of the tincture; ſlept well, trifling ſweat, no nauſea or vertigo, bowels ſoluble, tongue healthy; a ſlight appearance of the eruption; pain in the ſide continues; cough more frequent, and expectoration more copious; appetite tolerable, pulſe 80. Cont. Dos.—5th, Sleep interrupted by the frequency of the cough, no nauſea or vertigo, no colliquative perſpiration, b. t. and ſkin natural; the expectoration aſſumes a frothy mucous appearance with little pus. The pain in the ſide is leſs; appetite good; is much improved in ſtrength, and his countenance wears a more healthy aſpect; pulſe 90. Cont. Dos.—6th, Slept little better; cough and expectoration increaſed; pain in the ſide troubleſome; b. t. and ſkin natural; pulſe 75. Cont. Dos.—7th, Sleep almoſt prevented by frequency of cough; expectoration more copious; trifling night ſweat; pain in the ſide more acute; b. t. and ſkin natural; appetite tolerable; pulſe 78. Cont.—8th, Had tranſgreſſed the regimen I had preſcribed for him by drinking freely of ſtrong malt liquor; in conſequence he had ſlept ill; experienced a copious return of the night ſweat; cough, expectoration, and pain in the ſide conſiderably increaſed; bowels, tongue, and ſkin natural; appetite bad; pulſe 100. Aug. Dos. ad gt. xxv. —9th, Was prevented by other engagements from ſeeing him. —10th, Complains of conſiderable debility; a propenſity to ſleep when not diſturbed by the cough, which is very troubleſome; expectoration more profuſe, but not more purulent; pain in the ſide very acute; appetite very bad; colliquative night ſweat continues; b. and ſk. natural; tongue foul; pulſe 88. Cont.—11th, Sleep ſtill prevented by increaſe of cough and expectoration; night ſweats ſtill copious; pain in the ſide continues troubleſome; feels no inclination for food, and labours under very conſiderable debility; b. t. and ſk. natural; pulſe 75. Cont.—12th, Viſited him early in the morning; ſleep had forſaken him during the whole of the night; the increaſe of cough is conſiderable, attended with violent vomiting; extreme debility and acute pain in the ſide; and his ſtomach rejects

jects food; the expectoration is copious, but with little appearance of pus, which circumstance alone induced me to continue the Digitalis, the other unfavourable symptoms almost inclining me to desist from its further use; pulse 50.—Ordered him to omit taking the drops until bed-time.—13th, The urgent symptoms appear much more favourable; he had slept better; colliquative perspiration diminished; appetite amended; cough and expectoration less; b. t. and sk. natural; pulse 73. Cont. —14th, Slept much better; no night sweat; cough less frequent; expectoration much diminished; appetite improved; pain in the side somewhat relieved; b. t. and sk. natural; pulse 74. Cont.—15th, Sleep much disturbed; cough and expectoration again increased; as also the night sweat; pain in the side rather severe; appetite bad; b. t. and sk. natural; pulse 80. Cont.—16th, Every symptom remained much the same as on the day preceding; appetite rather better; b. t. and sk. natural; pulse 75. Cont.—17th, Slept tolerably well, very little perspiration; cough and expectoration less; appetite better; b. t. and sk. natural; pulse 73. Cont.—18th, Very bad night; complains of intolerable head-ach; anxiety and languor extreme; no appetite; b. t. and sk. natural; Pulse 63.—19th, Watchfulness, anxiety, head-ach, &c. increased; cough much less frequent, and expectoration much diminished; no night sweat; appetite very bad; b. t. and sk. natural; pulse 59.—On inquiry, I found the attendant had deviated from the directions I had given her, by administering gt. xxx. pro gt. xxv. of the tincture each dose; Cont. gt. xxv.—20th, The symptoms were rather relieved; had slept tolerably well; cough and expectoration continue to decrease; appetite better; b. t. and sk. natural; pulse 65. Cont.—21st, Slept much better; experiences little inconvenience from the cough; the expectoration very inconsiderable, and *not at all purulent*; a slight return of the colliquative perspiration towards morning; has still slight head ach; appetite improved; b. t. and sk. natural; pulse 70. Cont.—22d, Every symptom appears more favourable; b. t. and sk. natural; pulse 68. Cont.—23d, The unfavourable symptoms continue rapidly to subside; sleeps well; appetite rather craving; b. t. and sk. natural; pulse 73. Cont.—24th, Sleep sound and refreshing; no colliquative sweats; the appetite very good; cough seldom occurs, and the expectoration is trifling; no pain in the side; b. t. and sk. natural; pulse 70. Cont. 25th, Every symptom still more favourable; pulse 73. —26th, Still continues to amend; pulse 70. Cont.—27th, No cause for diminution of hope, as favourable circumstances increased; pulse 71.—28th, The disease continues to give place to returning health; pulse 71. Cont.—29th, Every thing seems

to

to indicate a speedy though progressive recovery; pulse 70. Cont.—30th, Complains of watchfulness occasioned by acute pains in the knee-joints, apparently rheumatic; cough and expectoration very inconsiderable; pulse 69.—R. Pulv. Ipecac. comp. ℈j. hora somni sumend. R. Linim. sapon. tinct. opii. aa. ʒj. M. F. Linim. part. dolent. sæpe applicand. Cont. tinct. digital.—31st, The rheumatic affection has yielded to the sudorific powder and anodyne liniment. He scarcely ever experiences any occurrence of cough, except a little on first lying down in his bed; pulse 73. In short, not to tire your patience further by useless repetitions, I shall briefly observe, that he soon became convalescent; nearly a month has elapsed since he has experienced the smallest inconvenience from cough or any other unfavourable occurrence. He at present pursues his general occupation with his usual alacrity.

With the most sincere wishes for the long continuance and prosperity of your very excellent and laudable publication, I remain, &c.

Bradford, Wilts, Feb. 5, 1801. O. W. BARTLEY, Surgeon.

The following Letter from Dr. MARSHALL *has been transmitted to the Editors for Insertion in the Medical and Physical Journal.*

DEAR FRIEND,

FROM Tetuan Bay I did myself the pleasure of writing you, informing you that I was busily employed inoculating the fleet under Lord Keith, who issued a general order for that purpose to all the ships under his command; since then I have continued with him, and shall proceed up to Malta, for which place we set sail to-morrow.

I have now to tell you, what before I was suspicious of, that the matter I brought with me from England, after being kept three months, became quite inert; and though it was capable of producing an inflammation in the inoculated part, yet the pustule produced, did not partake in the least of the Cow-pox characteristic marks, nor produced any constitutional effect whatever; accordingly, all those upon whom it was tried, I again inoculated with the recent fluid matter. I have also, in presence of the medical men of Mahon, the jurats, and a number of the inhabitants, inoculated an infant who had had the

the Cow-pox, with the Small-pox virus, procured by one of the phyſicians preſent; the child reſiſted the infection, and of courſe, convinced thoſe who were unbelievers of the efficacy of the Cow-pox. Thus, the bleſſing of the Vaccine Inoculation is every day ſpreading more and more: I hope, in a very ſhort time, to carry it up to Sicily, along with the fleet, where it will have a more extenſive field to range in.

The army, from the liberal uſe of freſh proviſions and fruit, have got free from the ſcurvy; but thoſe regiments that were recruited out of the militia, are falling off very faſt, numbers of them dying daily: I think, upon their landing in Egypt, they will muſter very thin. We have certain accounts of ſix veſſels having failed from Toulon on the 13th inſt. with troops (ſuppoſed about 6,000) and ſtores for Alexandria; if they eſcape our ſhips and land ſafe, it may ſerve to embarraſs our operations there very much. I have had an opportunity of peruſing many papers and documents reſpecting the plague; and from what I there obſerve, I ſhould not heſitate in going with the expedition, for the purpoſe of procuring better information upon the ſubject, had I not another material object to employ me. It will give me great pleaſure to hear from you when you have leiſure. Believe me, &c.

His Majeſty's Ship, Foudroyant.
Mahon, Nov. 27, 1800.

W. MARSHALL.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IN declaring my reſolution, through the medium of your Journal, not to anſwer your correſpondent, Mr. Watt, I was actuated by motives of reſpect towards yourſelves, and decorum to your readers; as, I conceive, your object is to promulgate the knowledge of truth, and theirs to acquire uſeful information; neither of which can be promoted by the continuance of a diſpute, which, by the conduct of my opponent, has degenerated into PERSONAL ABUSE; ſo thinking, and acting from ſuch motives, it is not without ſurprize that I perceive you have printed in your Journal for the preſent month, a letter from him, in which I am charged with having declined the controverſy, becauſe I find *my attack no longer defensible, and therefore get rid of it in the best way I can*; and likewiſe, am loaded with ſome more of that kind of perſonality which has

has already placed him beneath my farther notice. It is not for me to queſtion your motives for inſerting his letter, as I have no doubt that that juſtice which regulates your conduct, will induce you to publiſh this anſwer, which *that letter has made indispensably necessary.*

He ſays, "he leaves your candid readers to determine, whether my anſwer to his *original* communication, or his reply, contains moſt unprovoked, illiberal, and PERSONAL ABUSE." If they have not yet determined this point, they certainly will do ſo; and, perhaps, the following recapitulation may facilitate their labour in making the deciſion.

Mr. W. communicated to you what he was willing to make your readers believe was an *invention or discovery* of his own. Without attempting to inveſtigate his own actual and private knowledge on this point, I ſhall be permitted to obſerve, that every man who makes his own diſcoveries public, hopes to gain reputation, at leaſt, by the communication; and every Plagiary who meanly extracts from the works of others, any thing which he artfully attempts to introduce as his own, hopes to purloin that reputation to which his conſcience tells him he has no right. Mr. W. ſtands in one of thoſe ſituations; and whichever it may be, it was natural for him to loſe his temper, when he found himſelf diſappointed of the objects he had in view.

Every man who writes, has an undoubted right to arrange his ſubject in that manner which appears to him to be the beſt; I heartily pity the man, who ſits deliberately down to write all that he can utter upon any ſubject. I was willing to make my anſwer as brief as the nature of the caſe would allow, and, therefore, only mentioned ſuch circumſtances as were matters of great notoriety in this part of the world; I enlarged on ſuch as required elucidation, and declared my intention to reſume the ſubject at a future opportunity: Perhaps, moſt of your readers underſtood, that if any thing mentioned in that anſwer required explanation, it would be explained when the ſubject was reſumed; perhaps Mr. W. FEARED this might be the caſe; and if he did not ſeriouſly intend to put an end to a diſcuſſion, from which he could expect no gratification, he *accidentally* hit upon a method of doing ſo moſt effectually.

In anſwering Mr. W. I ſaid nothing *directly*, or by implication OF HIM, either as an individual or as a profeſſional man, for the beſt of all reaſons,—I knew nothing about him: But of his work, as it appeared in your Journal, I was able to judge, and even thought myſelf capable of enabling thoſe to form a correct opinion of it, who had not reflected ſo much upon it as I have done; and your readers will determine whether I have or have not ſucceeded: At leaſt, they will allow

there was nothing improper in the attempt; the work was a fair object of criticism; and if its author had asserted things that were not true, if he had exaggerated facts, and drawn conclusions that did not regularly follow from the premises laid down, is he to blame *himself* for the unenviable situation in which he has placed himself; or *me*, for shewing the exact quantity of respect his communication is entitled to?

Mr. W. had an undoubted right to reply to my answer, and I believe he made the best answer his talents would enable, and his temper would permit him to make; but *fearing* that it would not effectually convince his readers, or silence me, he called in an auxiliary, which, like many others, can only disgrace the cause it is employed in: He turned *from* the subject *to* the author, and applied epithets to me which I could only answer properly, by treating with silent contempt.

As this is the act which justifies me in saying he is fallen too low for me to notice, the following quotations are produced in proof. P. 499. "I should certainly have suspected, had Mr. S. been writing another *Practical Essay* on distorted Limbs, that he had foisted in the *Shoe-maker* with little other motive than merely to *swell* the size of his volume."

Again, "Indeed, with regard to the labours of Mr. Holmes, *the Shoe-maker, and with him I may* ASSOCIATE *Mr. Sheldrake, the Truss-maker*," *&c.*

Again, p. 502. "Let him have recourse to the laws of his nation, and seek redress in its proper channel, and not with his NATIVE EFFRONTERY, *criminate* those by BARE ASSERTIONS, whom he cannot *condemn* by SOUND ARGUMENTS.

If I understand the construction of language, the first is a direct insinuation, that I am capable of fabricating a book, by foisting in matter unconnected with the subject, merely *to swell the size of the volume*; in other words, endeavouring to obtain money by false pretences. Of the second, I am to understand that, I had described Holmes, * the Shoe-maker, as an ignorant person, who had pretended to do what he was unable

* As this man has been dead many years, he can sustain no injury by his name being thus publicly mentioned. It is, indeed, necessary to do this, as it affords a singular proof of Mr. W's accuracy, and will shew how incapable he is, of distorting any thing to answer his own purposes. I mentioned that Holmes had been dead several years; Mr. W. made what observations he thought proper on the passage, and then proceeds, "*If there* IS *such a man as Mr. Holmes, &c.*" If any one should investigate the subject, to shew Mr. W's side of it, he would first enquire for Mr. H. and finding there IS no such person, his argument would run thus, "AS THERE IS *no such person*, &c." and he would form many conclusions that would be highly favourable to Mr. W's views.

able to perform; Mr. Watt, by *aſſociating* me with him in *Italics*, meant to inſinuate, that I was a man of the ſame deſcription. The third is too plain to require explanation, and is that kind of charge, which no man would make in the face of another, and which Mr. W. has made very courageouſly, when at a diſtance that ſecures him from all the conſequences. This part of Mr. W's reply, I call *ſlanderous perſonal abuſe*.

This Mr. W. affects to conſider as a victory; it is a ſingular one, however, and conſidered as a controverſial artifice is not without merit. If it can be eſtabliſhed as a precedent, there are many men who, like Mr. W. are deficient in argument and temper, and could eaſily ſupply the defect by the application of ſuch terms as preclude all reply in writing, and of courſe, upon this principle, will be victorious in every conteſt they engage in.

This victory, ſuch as it is, will not be of long duration, for I have promiſed to convey to you, an account of my method of curing theſe diſeaſes, which cannot be done without previouſly examining other theories that have preceded my own. And in the courſe of that communication, your readers will be enabled to aſcertain, whether in my reply to Mr. W. I advanced a ſingle circumſtance that deviates from the ſtricteſt truth.

Mr. W. ſeems to be endued with ſo much of the faculty of *ſecond ſight*, as enables him to foreſee this; and this foreſight is, I believe, the real cauſe of the notice he favours me with in your laſt Journal. He had advanced, with all the dogmatiſm of infallibility, that *all diſtortions in the legs and feet of children, by whatever cauſe produced, or* HOWEVER FORMIDABLE *they* MIGHT APPEAR, might be cured by the application of the ſame means: The two caſes I have tranſmitted to you, prove the reverſe of this; for though they are caſes of the ſame diſeaſe, they are in circumſtances ſo different, that no one will believe, and even Mr. W. has not attempted to ſay, that the *ſame means* that were employed to cure the one, could have cured the other. This is fatal to his dogma, and this is the ſhaft that rankles in the breaſt of Mr. W. But though he knows this, he is too uncandid a diſputant to confeſs it. As the doctrine to be deduced from theſe caſes, is directly oppoſed to his dogma, he would have been right in ſaying, THEY were directed againſt *it*; or, if he pleaſes, againſt *him*; but he muſt, at the ſame time, have admitted his own miſtake. This he had not philoſophy enough to do, nor had he fortitude ſufficient to be ſilent, he therefore pretends to diſcover, that in conceiving the uſe of the terms*

* Leſt Mr. Watt ſhould imagine, that I decline the diſcuſſion of this point too, *becauſe it is not defenſible*, I beg leave to obſerve that the terms varus and valgus, only deſcribe the poſition of the foot, but convey no ideas reſpecting

varus and valgus, my cenſure is *principally directed againſt* HIM. Now, as he proves that the ſame words have been uſed in the ſame ſenſe, "not only by medical writers, but even by claſſical authors, for at leaſt two thouſand years," and as my cenſure was expreſſed in the moſt general terms, it is moſt certain that it could not be directed principally againſt HIM, unleſs *he* is the *principal* of all the medical and all the claſſical authors who have flouriſhed during that time. If the conſtruction of my language will not bear me out, I beg leave ſolemnly to declare, that I meant no reference to Mr. W. in that paſſage, though I certainly intended that the *facts* of thoſe caſes ſhould be oppoſed to the *fallacy* of his doctrines. It is whimſical in Mr. W. to ſay he "*hates controverſy*,* while he ſhews, that he poſſeſſes in perfection one talent of the greateſt value to a profeſſed controvertialiſt, viz. that of evading thoſe parts of a ſubject on which he is completely defeated, and ſubſtituting others from which he expects to derive leſs diſgrace. Of this talent, the paſſage abovementioned is one compleat ſpecimen; another exiſts in his reply to my anſwer; this it becomes me to notice, as this is the only opportunity I ſhall have of doing ſo, and as it is intimately connected with that part in which he ſo elegantly mentions my *native effrontery*.

In his original communication, he ſays, "When I firſt thought of this inſtrument, I had no idea of its being applied to any other caſe but the *vari & valgi*; and there only when the diſorder happened to lie in the ancle joint; but *I have since*

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reſpecting the ſtate of the parts concerned in the diſeaſe. The term Club-foot is, perhaps, a vulgariſm, poſſibly a local term, but certainly conveys no correct idea beyond that of a diſtorted foot; if, then, I ſay ſuch a patient has a Club-foot, and add an accurate deſcription of the ſtate of the parts concerned in the diſeaſe, and give the beſt information that the nature of the caſe will allow, and that a profeſſional man can require, for from the *whole of the deſcription* he underſtands the real ſituation of the patient; but if I ſhould only ſay, he has a varus, or valgus; and if I ſhould quote Plautus, to prove that theſe were *good old claſſical Latin terms*, I ſhould obtain more reputation for learning than for capacity to make others underſtand the nature of the diſeaſe I meant to deſcribe.

* When on a former occaſion, Mr. W. found that part of his writing bore a different interpretation from what he intended, he made a ſingular attempt to eſcape the dilemma, by obſerving, that *either* the word NOT was improperly inſerted in the manuſcript, OR, that it had been interpolated by the Printer. I made an experiment, by omitting the word *not*, but the ſenſe was not improved by the omiſſion, therefore the excuſe could not ſerve him; but on the preſent occaſion, it may do extremely well, as I think it very probable that Mr. W. wrote, "*I hate contradiction*," which the compoſitor has, by miſtake, ſet up, "*I hate controverſy*;" this amendment will not only improve the reading, but will likewiſe prove the fact.

ſince thought, that by a ſmall alteration it may be applied to all the different kinds of diſtorted limbs with conſiderable eaſe and advantage."

He then deſcribes his *notion* of applying a ſpring, to cure curvature of bones of the leg, and refers to a figure in his plate. It is this notion, or idea, which I believe to have been borrowed, copied, or by whatever term plagiariſm may be deſigned, from the ſpecification of my patent To prove this, I cited the paſſage at large from the ſpecification, compared it with the paſſage in Mr. W. and by referring to the figures in the plates, it will appear, that the diagram by which I illuſtrate the principle, exactly reſembles that application of a ſpring which Mr. W. calls his own invention.

The inference is *inevitable*; the reſemblance between the two paſſages is compleat. The priority of publication is with me; *therefore*, it is moſt certain, *either* that by a ſtrange coincidence of circumſtances, Mr. W. did invent that which I had publiſhed ſome years before, *without the leaſt knowledge of my publication*, or that he had taken from the latter an idea, which he had tranſplanted into his own, and through the medium of your Journal offered it to the public as an *idea of his own:* Thus meanly ſeeking to deprive me of what reputation may attach itſelf to the diſcovery.

Whatever doubt then exiſted as to the nature of the fact, has been diſſipated by Mr. Watt; he knows the operation of his own mind on the ſubject; and if this idea had originated with himſelf, he could have eaſily ſhown that it did ſo, for the exiſtence of ſimilar paſſages in different authors does not neceſſarily imply plagiariſm in either. Has Mr. Watt done this? No! With the ſpirit of a freebooter, who knows himſelf to be out of the reach of the law,* he exclaims, "*If my inſtrument nearly reſembles Mr. Sheldrake's, it is equally efficacious*; if more imperfect, it need not have given him any alarm; and inſinuates, that I fear him as a rival: And aſks, in a tone of bravado, why I do not have recourſe to the law?

To obviate all the miſrepreſentation that Mr. W. is evidently willing to derive from this ſource, I beg leave to obſerve, that according to my theory of theſe diſeaſes, and the treatment I have

* This ſimile may ſound harſhly, but it is moſt ſtrictly juſt; the protection of property by patent granted in England, does not extend to Scotland; *therefore*, if Mr. Watt had copied fifty patent inventions, for which the law might puniſh him in this country, he might enjoy the fruits of his ingenuity in his own in perfect ſafety, for *our laws could not reach him there*; of courſe, his aſking why I did not have recourſe to the laws of *my* country, is mere vapour.

I have founded upon it, not only no one kind of inſtrument can cure all the varieties of the diſeaſe, but no one ſpecimen of the diſeaſe can be cured by the ſame inſtrument; this will be fully explained hereafter: In the mean time, I beg leave to obſerve, that if a congreſs was aſſembled, of all the patients who have been under my care, with their friends, and the medical men who have attended them, they would unanimouſly determine, that Mr. W. has not at preſent the moſt diſtant comprehenſion of my plan; that the particular part which he has borrowed from my book, is not what, he ſays, he *has* practiſed, but what he *thinks*, "may be applied to all the different kinds of diſtorted limbs with conſiderable eaſe and advantage;" and to this I beg leave to add, that though the principle is undoubtedly true, whoever ſhall try that particular modification of it which he recommends, will find it cannot anſwer the purpoſe he recommends it for.

With this exertion of my *native effrontery*, I ſhall take leave of Mr. Watt, unleſs you ſhould indulge him, by publiſhing more of his perſonal reflections on myſelf: It is to repel *ſuch reflections only* that I have written this; and truſt, that *you* will ſee the propriety of putting an end to *ſuch* diſputes. But whatever may be advanced on profeſſional ſubjects ought to be liable to accurate inveſtigation, which I ſhall never wiſh to avoid, and which, I hope, will continue to be the chief object of your valuable Journal.

In my next, I ſhall continue the ſubject of my laſt; I ſhould have done ſo before, but I am waiting for the opinion of a gentleman who is at a diſtance from town, and which I think eſſential to the confirmation of ſome facts I mean to lay before you; as ſoon as I receive it, they will be communicated. I am, &c.

Feb. 10, 1801, *No.* 50, *Strand.* T. SHELDRAKE.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

I Was much pleaſed with the peruſal of a letter inſerted in your Number for February, 1801, from the pen of Mr. Cuſtance, and intended as a reply to a former epiſtle of mine, as it affords me the gratification of again ſoliciting the public attention to a ſubject of conſiderable importance.

During

During an extenſive practice among putrid fevers, I have had many opportunities of obſerving the effects of Yeaſt, particularly after the medicines uſually adminiſtered had loſt their ſalutary influence; and finding among the generality of caſes, not only a more rapid but ſucceſsful termination, I was pleaſed with the reſult, and determined, in moſt inſtances that occurred, to make trial of its efficacy; though, frequently, from the averſion of the patient to the naufeouſneſs of its taſte, I was neceſſitated to have recourſe to the old routine, and am happy to add, not unfrequently with advantage. But in the typhus of young children, the quantity of bark that could be got down was ſo ſmall, as to be productive of no good effect, and among them a more powerful remedy has long been a deſirable object. Whenever an opportunity occurred, I did not fail to adminiſter yeaſt, and can with confidence aſſert, among a variety of inſtances, not one terminated unfavourably. Such aſtoniſhing ſucceſs firſt prompted me to inſert the hiſtory of a cure effected ſolely by this medicine; and as ſeveral gentlemen of undoubted veracity had already communicated a variety of caſes in which the anti-putreſcent properties of yeaſt had proved beneficial, I thought it needleſs to trouble you with more, not doubting but their teſtimony, in addition to mine, would excite enquiry. With theſe principles only, I ventured to intrude on your attention; I believe, I avowed my motive in a former communication; and having peruſed ſeveral letters from gentlemen of eminence, recommending its uſe from principles of humanity, I confeſs I was hurt to obſerve a man of Mr. Cuſtance's abilities condemn, in ſo vehement a manner, what I knew from experience to be uſeful. Perhaps, a miſtaken judgment might miſ-conſtrue his meaning; but what are we to conclude from the following lines? "Thus we ſee, that however well a ſtrong Dutch girl may bear *working* with yeaſt, *it will not be ſafe* to have recourſe to ſuch means in recovering our fair country-women from putrid fevers!" By *working*, I ſhould ſuppoſe he meant to convey an idea as if jalap or gamboge had been given; and it appears plain to one poſſeſſed only of common ſenſe, that he perſecutes this remedy, when he ſays, "*it is not ſafe* to have recourſe to ſuch means in recovering our fair country-women from putrid fevers!" I cannot help admiring the ingenuity with which he endeavours to convince you that I have miſconceived the purport of his letter, by fixing my eye too long on a particular paſſage; but unleſs I am deſtitute of underſtanding, the words require no more than to be taken in their uſual acceptation.

Mr. C. informs us, his reaſon for diſapproving of yeaſt was, to "obviate the danger of empiriciſm." Why then did he

he addreſs his letter to the Medical Journal? as I am inclined to think, this publication is but ſeldom peruſed by perſons of that deſcription, and chiefly calculated for the inſtruction of men of education, who, by imparting their progreſs in the cure of diſeaſes, and the remedies employed, are enabled to develope many improvements, and diſcard injurious preparations. Had it been inſerted in the *Armenian, or Methodist's Magazine*, where, according to Mr. C. an exaggerated account firſt appeared, it might, probably, from falling into the hands of the lower claſs, have been productive of ſome advantage.

It is ſomething ſingular, that this gentleman, after expoſing my inadvertency, ſhould err in a ſimilar manner. He proceeds: "*The statement of the case, as given by Mr. G. appears to be very vague and unsatisfactory. He tells us that the boy was attacked on the* 10*th of July with the usual symptoms of typhus. On the third day, that is, on the* 12*th, the sponging and use of yeast appear to have been begun. From the* 13*th he became evidently better: In two days after the yeast was discontinued. On consideration of the wonderful change which so rapidly succeeded the administration of the yeast, says Mr. G. I cannot but imagine it to be the best remedy in putrid fevers ever yet discovered. Are we to conclude from this relation, that Mr. G's patient was cured of a putrid fever within five days from its first attack: If I can understand Mr. G. right, this is the conclusion he wishes to be drawn.*" According to this mode of reaſoning, the words "*evidently better*" are conſtrued into a perfect cure; for if my letter is referred to, I made uſe of no other expreſſion; I conceived the boy, at the time the yeaſt was diſcontinued, *free from any putrid tendency*, though the ſeverity of the attack made him exceedingly low for ſome time after.

Mr. C. is of opinion, becauſe bark was alternately adminiſtered in conjunction with yeaſt, the appellation of ſpecific beſtowed on the latter is unjuſt; the cure, ſays he, may as well be attributed to the bark; and again, "*in the solitary case with which Mr. G. has favoured the public in No. XXI. the patient was sponged all over, and directed the free use of yeast and wine.*" As I am unacquainted with the circumſtances of the cure recorded in the Methodiſt's Magazine, I cannot preſume to offer an opinion; nor do I credit the poſſibility of a patient in the laſt ſtage of putrid fever, being ſeen the next morning, after taking ſome yeaſt, walking in his garden apparently well; but from my own knowledge I can affirm, that it has proved effectual in reſtoring convaleſcence, after repeated quantities of bark had failed; and ſurely this circumſtance alone is ſufficient to eſtabliſh its claim to ſuperiority, when it raiſes a ſuperſtructure on the failure of ſo popular a medicine. Not that

I wiſh

I wiſh to decry the utility of bark; but it does not unfrequently happen, that a very ſmall and inſufficient quantity to counteract the putrid diatheſis can be got down, and where it is plentifully adminiſtered, even to the extent of an ounce of powder in twenty-four hours, (and no leſs can be depended upon) the tone of the ſtomach is often, from a variety of cauſes, and eſpecially hard drinking, ſo much impaired, as to be incapable of converting it to any ſalutary purpoſe. But I am authoriſed by experience to affirm, that in the far greater part of theſe inſtances, where bark was wholly uſeleſs, even ſmall doſes of yeaſt have been eminently ſerviceable.

But, ſays Mr. C. in the ſolitary caſe which I addreſſed to your Journal, many of your readers will attribute the ſucceſs that followed as much to the vinegar and wine as to the yeaſt. This is the firſt account I have ever heard of cold vinegar (or water, for their influence in affuſion is preciſely ſimilar) actually curing putrid fever; I will quote ſome part of that letter without altering the meaning, and ſee how far his ideas agree with the motive that induced me to make uſe of it. After ſtating the manner in which I applied it, I obſerved, "*he was ſponged again at night, and I ſaw him ſoon afterwards evidently better, his pulſe being regular, and body cool.*" Does it not appear very conſpicuous, that the intention of applying cold vinegar was to diminiſh the febrile heat, and conſequently promote perſpiration; and that it was uſed as an auxiliary to the remedy? On what authority this idea is grounded, I am at a loſs to imagine, for if we refer to the writings of both antient and modern practitioners, we ſhall find no one inſtance on record, of cold affuſion curing putrid fever without the aſſiſtance of an internal medicine; that it has removed ardent fever, and in all topical inflammations proved of ſingular efficacy, I am ſatisfied; but never before heard of ſuch decided ſuperiority in the former diſeaſe. If we look into the writings of the antients, we ſhall find they uſed it with advantage in hot burning fevers. Hippocrates ſays, if the patient is thirſty while labouring under an acute fever, cold water is of great uſe, if given till it makes him vomit. Galen ſays, that cold water is a perpetual remedy, either by immerſion or drinking. Paulus obſerves, that heat may be extinguiſhed by cold water, by which we have wholly cured burning fevers. Celſus adviſes the uſe of cold water, and directs the patient to drink to ſatiety; and Paulus alſo adds, the cold bath alone is of ſervice to thoſe who labour under an ardent fever without an inflammation, a tumor, or an eryſipelas; and in conformity with theſe obſervations, the learned and ingenious Dr. Currie has publiſhed a variety of inſtances where affuſion has removed the in-

tenſe heat; but the diſcovery of its ſolely curing putrid fever, even allowing the uſe of wine, was reſerved for Mr. Cuſtance. Your readers will then perceive the motive of my actions; and I hope I have made it appear thus far my arguments were not wholly inconcluſive. Probably, the happy termination of this ſolitary caſe might be owing to the wine, but this ſuggeſtion is equally defeaſible. Let us refer to the ſtatement; "from the 10*th to the* 12*th*, *that is, for three days, he took repeated quantities without the least benefit, and on the latter, the yeast and sponging were begun*; and by a proper perſeverance in their uſes for three days longer, (making in the whole a period of ſix days, which Mr. C. ſhortened) the boy was ſo far *cured*, (if I may be allowed the expreſſion) as to be out of danger. After having previouſly taken ſufficient quantities of wine, I am ſurprized it manifeſted no apparent effect, or that its anti-putreſcent properties ſhould be dormant ſo long, to burſt forth at laſt with renovated vigour. But if the generality of your readers, as Mr. C. conjectures, will attribute this providential recovery to the wine, I will humbly acquieſce, though it is plain, Mr. C. is willing to beſtow the laurel on any thing but yeaſt.

Mr. C. juſtly obſerves, I have brought forward but one inſtance of its ſucceſs, and this is undoubtedly a very fair objection, as it is impoſſible to form any deciſive opinion from the hiſtory of a "*Solitary Caſe.*" As I have already ſtated my motive for ſo doing in the former part of this letter, I ſhall content myſelf with adducing ſome additional information, and ſuch as, I hope, will convince Mr. C. that my ideas are not hypothetical.

The daughter of —— Burnham, a labouring man, at Quaenton, near this town, ætat. 6, was attacked on the 14th of November with the uſual ſymptoms of typhus. As I did not ſee the child till the 17th, I cannot poſitively declare, whether ſhe had any thing previous to my viſiting her, but at this time her pulſe was languid and unequal, tongue black and dry, and a conſiderable number of petechiæ made their appearance on the breaſt. She was then ordered whatever quantity of red wine could be obtained from parochial aſſiſtance, (which I need not obſerve, is in general ſcanty,) and had a pint of ſtrong decoction of bark, with tincture and extract, and aromatics, acidulated with the acidum vitriolicum, and bark powders to be taken in the intermediate times. I heard the next morning ſhe was much the ſame as when I ſaw her, and deſired they would perſevere in the uſe of the bark and wine. I viſited her on the 19th, and found her in a delirium, which had continued from the night preceding. The bark was entirely rejected,

jected, and nothing would remain on the ſtomach but red wine, of which ſhe had taken about three quarters of a pint. The petechiæ were not increaſed, but aſſumed a more purple appearance, and the fæces were regularly diſcharged, but quite black and offenſive. As the dernier reſort, I recommended them to procure ſome ſmall-beer yeaſt, and having made an infuſion of malt, to give a large ſpoonful of the former, diluted with the latter, every four hours. This method was regularly perſiſted in, and I had the pleaſure to hear the next afternoon, ſhe had paſſed the preceding night much better, and the delirium was ſomewhat abated. 21ſt. I was much pleaſed to obſerve the appearance of my little patient; ſhe was ſenſible, and gave me her hand on approaching the bed-ſide. The yeaſt was continued as before, and the pariſh officers thinking her out of danger, refuſed to continue the wine; but, on application to the worthy Rector of the village, he generouſly provided her with a bottle. The next day her father informed me ſhe was ſo much better, I need not go to Quaenton; and as I heard no more from him, I did not call till the 26th, when ſhe was ſo far recovered, as to be free from any complaint except debility.

It is worthy obſervation, that the ſon of this man was afflicted with the ſame diſeaſe a month before, and had large and repeated quantities of bark and wine, with acids, but he died in a fortnight. This I mention, as it occurred at nearly the ſame time, and in the ſame family; the particulars of which are well known to the worthy Rector. It will be needleſs to particularize every ſymptom; I ſhall therefore briefly ſtate the moſt remarkable incidents.

E. Gibbons, a poor woman of this town, was ill during a week with putrid fever, and the treatment with bark, &c. ſeemed entirely uſeleſs; but on uſing the yeaſt, and infuſion of malt, *ſhe was out of danger in four days!*

The daughter of Mr. M——ly, of this town, ætat. 5, was exceedingly ill for twelve days, and was treated with bark, red wine, and brandy, but in a ſtate of approaching diſſolution; *one tea-cup full of yeaſt only appeared to reſtore her!*

Mr. S———y, of Claydon, and his child, ætat. three years, were now given over by an eminent phyſician, but were providentially ſaved by the timely adminiſtration of yeaſt.

From theſe ſtatements will it not appear ſatisfactory to a candid mind, that the early adoption of yeaſt not only accelerates the criſis, but is productive of a ſucceſsful termination. It has had to combat with the very worſt caſes, and is moſt generally poſtponed till after the exhibition of bark; and in

numberleſs inſtances, where death appeared inevitable, it has reſtored the ſufferer with unexampled rapidity. I would recommend Mr. C. to peruſe an ingenious pamphlet lately publiſhed, and entitled, "A ſhort Account of the infectious Malignant Fever, as it appeared at Uxbridge and its vicinity in the year 1799, and where the antiputreſcent influence of yeaſt was peculiarly conſpicuous. The intelligent author informs the public, "*he has found it particularly uſeful in a great number of caſes, and therefore cannot avoid recommending it as a moſt powerful antiſeptic in malignant fevers.*" In the caſe recorded by Mr. Brown, in No. XVI. the return of health, after ſuch ſevere indiſpoſition, was truly remarkable; and Dr. Lewin, in his ingenious letter, obſerves, "IN A FEW DAYS, on the compariſon, I had the pleaſure to obſerve ſome of our little patients much benefited by it, and was particularly ſtruck with the ſpeedy convaleſcence of one whoſe ſymptoms had been moſt diſtreſſingly ſtationary." Alſo, in an Epiſtle I had the pleaſure to receive from the Doctor, he adds, (what will be found explanatory of the former caſe publiſhed by me in No. XXI. which, on account of the ſpeedy relief experienced, is objected to by Mr. C. as vague and unſatisfactory) "I feel confident in aſſerting, that I have witneſſed more examples of true typhus ariſing at their acme in ſeven or eight days ſince the adoption of this remedy than formerly;" and concludes, with aſſuring me, that "it has been employed by the moſt judicious in that neighbourhood, and is extenſively uſed in a part of Staffordſhire, Worceſter, and Shropſhire."

Mr. C. has deemed my former letter unworthy a man, who profeſſes to be ſearching after truth; but how my actions have juſtified ſuch a concluſion, I am at a loſs to conjecture. It has been from a wiſh to ſerve that invaluable cauſe that I have ventured to obtrude on the public attention, knowing that oppoſition is the ſureſt teſt of truth; and facts cannot be more firmly eſtabliſhed, than when aſſailed by refellible enquiry. I have made no claim to diſcovery; nor have my views been prompted by ought but humanity and a love of inveſtigation; and I am inclined to believe, if Mr. C. rightly conſiders, he will loſe a portion of that reſentment he apparently feels. It is evident I have not built my expectations on ſpeculative notions, or been amuſed with the illuſion of hypothetical doctrine; for in all caſes where a putrid tendency has manifeſted itſelf, I have found the happieſt effects from its uſe, particularly as a poultice in foul putrid ulcers.

One objection made to my letter, is obviated by the explatory note of Dr. Bradley, as it appears that wine cannot be ſuppoſed fraught with more eſſential ſervice than ſupporting the

vis

vis vitæ. As Mr. C. has conducted his remarks on the whole in a fair manner, and avoided thoſe perſonal reflections too frequent in controverſial diſcourſes, I am happy to elucidate his enquiries, and willing at all times to anſwer any reaſonable doubts, when conducted in a liberal manner. Shielded by the irreſiſtible banner of truth, I can bid defiance to the ſhafts of malevolence, and oppoſe with ſafety the language of experience to miſſile weapons, that will only recoil on their authors. Happily for mankind theſe important facts have been long known, and will eventually be in general eſteem; but, like all introductions into the ſcience of medicine, it will have an hoſt of enemies to contend with. So much does mercenary inclination on the one hand, and bigotry on the other, retard the progreſs of information.

Having no more deſire than Mr. C. to intrude on your attention, I ſhall take my leave of this ſubject, concluding in the words of Montaigne: "I have here a noſegay of culled flowers, and have brought nothing of my own but the thread that ties them."

I have the honour to be, &c.

Winſlow, Feb. 9, 1801. J. H. GROSE.

Mr. Potts, *on the Means of ſupplying the Loſs of amputated Limbs.*

A Patent has been obtained for a contrivance, which, in point of ingenuity, elegance, and utility, ſurpaſſes every thing which has yet been attempted of a ſimilar nature. It is known, that where amputation has been performed above the knee, any artificial leg which has yet been invented to ſupply the loſs, is very imperfect, as the perſon uſing it is obliged to make a ſemicircular motion with it in walking, and as the genuflexion or movement at the knee is ſo imperfect as to make the motion very aukward, inconvenient, and unnatural.

Mr. Potts, the patentee, whoſe attention was drawn to the ſubject by the loſs of his own leg, has conſtructed an artificial one, which he himſelf has worn for years, and which is poſſeſſed of the following ſuperior advantages: The knee and ancle joints are entirely at the command of the wearer; and the appearance of their motions is ſo natural, as very nearly to conceal the loſs of the extremity: The leg is made of light materials, and indeed of ſuch as imitate both the bony and fleſhy parts. It is worn with eaſe and perfect ſafety; it does not injure the dreſs, which other artificial legs are obſerved to do.

do. The wearer can kneel and riſe up; can ſit down and riſe up; can pull on a boot, and permit it to be drawn off by a boot-jack; he can turn the anterior part of the foot outwards and inwards; ride on horſe-back with perfect ſafety, and imitate almoſt every natural motion without any aſſiſtance of his hands. The patentee, who has ſuffered an amputation above the knee, can walk eight or ten miles with his leg of this conſtruction without fatigue.

(Signed) JAMES POTTS.

To Dr. BRADLEY.

Dear Sir,

Being convinced that the above invention is far ſuperior to any thing I have hitherto ſeen, (and I have had frequent opportunities of examining the inventions of others) I take the liberty of recommending it to the readers of your very popular Journal, and ſincerely hope the ingenious inventor will meet that encouragement which his merit entitles him to expect.

I am, &c.

Parliament Street, Feb. 21, 1801. W. LYNN.

P. S. I have the ſatisfaction to add, that I have introduced this invention to many of the principal ſurgeons in London, all of whom coincide in opinion with myſelf.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IF the following few remarks on the external uſe of the inner bark of the Daphne Mezereum, may be thought worthy a place in the Medical and Phyſical Journal, I beg that you will inſert them.

Linnæus claſſes ſeveral ſpecies of Daphne, but as I am acquainted with only two of them, the Daphne Mezereum, and Daphne Thymelæa, I ſhall confine myſelf to theſe only.

When, about thirty years ago, I firſt went to Ruſſia, I heard of the bark of the Daphne Thymelæa being uſed as a ſubſtitute for iſſues, and was adviſed to try it.

Happy to hear that any method had been thought of to produce

duce an uniform diſcharge from the ſkin, on any part of the body, ſo as to obviate the neceſſity of inciſion, an operation often very much dreaded, eſpecially by children, and always painful, I did not heſitate, the firſt opportunity that offered, to give it a trial, which I did, by cutting a piece of the intire bark into the dimenſion of about three-quarters of an inch ſquare, and ſteeping it in vinegar ſix hours; I then applied its inner ſurface to that part of the arm where iſſues are generally cut, and faſtened it on with a bandage.

After letting it remain on the arm 24 hours, I took it off, and there appeared on the part where it had been placed, a ſlight degree of inflammation, and the patient ſaid it itched a little. I then prepared another piece of bark in the ſame manner as before, and laid it on as on the former day, and ſo continued to do every day, till an excoriation of the ſkin and ſuppuration took place, which were kept up by the ſame means for about a year, when the patient, a young ſubject, who had been afflicted with a ſcrophulous complaint of the eye-lids, got quite well. After leaving off the bark, a few gentle purges were ordered, and no ill conſequence happened to the conſtitution from ſtopping the diſcharge from the wound.

The Thymelæa, the ſpecies of Daphne I made uſe of in the above caſe, was at that time exceedingly dear, and it was chance alone that made me acquainted with the Daphne Mezereum,* the ſort that I have made uſe of ever ſince, and which now occupies a place in the Pharmacopœa Roſſica.

For the ſpace of five and twenty years I have hardly ever ordered an iſſue to be cut, but have truſted to the Mezereum bark alone, where a diſcharge by the ſkin has been thought neceſſary; and have ſeen a great variety of herpetic and ſcrophulous affections, where it has been employed with evident good effects. In uſing it, care ſhould be taken to change it every morning, and to clean the ſuppurating part, as is done in common iſſues.

Sometimes the inflammation on the arm is conſiderable, and the ſuppuration abundant; yet neither of theſe ſymptoms is ever attended with any ill conſequence, their violence being ſoon abated by laying aſide the bark for a few days, and wetting the part now and then with a little Aq. Saturnina; afterwards,

* An old Finniſh woman, who lived ſervant in a houſe that I attended, ſeeing me uſe the bark, and hearing that it was very dear, told me, that a ſhrub, with a bark very much like that which I employed, grew in great abundance in Finland, in the neighbourhood of Peterſburgh. I deſired her to procure me ſome, which ſhe did, and on examination it proved to be the Daphne Mezereum, which, on trial, I found to have the ſame effect as the other ſort, except that it acted more ſuddenly and vigorouſly on the ſkin.

wards, its uſe may be renewed and continued as before. This method of promoting ſuppuration has the advantage of the pea iſſue, for the reaſon above mentioned, in obviating terror, and it is not nearly ſo painful as a perpetual bliſter, at the ſame time it is more under the controul of the ſurgeon.

After having ſaid thus much of the convenience of the above method of exciting inflammation and ſuppuration, in preference to other means for the ſame purpoſe, it may not be improper to remark, that I have long indulged an idea that (although the abſorption be but ſmall from the bark) it may have a ſpecific virtue towards curing many diſeaſes of the ſkin. As I have had occaſion to mention the Pharmacopœa Roſſica, which, at leaſt the laſt edition, I preſume not to be in the hands of many medical gentlemen in this country, I ſhall take the liberty to tranſcribe from it the whole of the article under the title Mezereum.

Mezerei cortex, radix. Daphne Mezereum, L. Cl. viij. Ord. Monogyn.

Frutex in Roſſia ſeptentrionali, et Siberia ſpontaneous.

Odor corticis ſicci nullus.

Sapor ſi diu maſticatur valde acris, fauces exurens, recentis acerrimus, inhærens.

Virtus in pauca doſi reſolvens, in majori draſtica, cardialgica, deurens.

Uſus. Exutorium fonticulorum, tumores ſchirroſi et venerei ut tophi venerei, dolores nocturni, tumores tonſillarum, teſticulorum, colli, parotidum, ulcera venerea, acres humores alicubi ſtagnantes.

Doſis. Radicis Mezerei drachmæ duæ, totidem liquiritiæ cum aquæ libris tribus ad libras duas decoctum, quod per diem conſumitur; cataplaſma ex decocto hocce, et farina; corticis ſicci, aceto vini, vel aqua, per octo vel decem horas macerata fruſtrum, longitudinis pollicis, latitudinis ſex vel octo linearum, imponitur plerumque brachio, ſubter loco, cui inſeritur muſculus deltoideus, vel aliis partibus, proſciti medici indicatione et ſpleniolo tectum faſcia firmatur.

Præter hunc fruticem aliæ Daphne ſunt ſpecies, quæ corticem viribus priori ſupporem erogant, ut Daphne Thymelæa, Daphne Gnidium, L. et hicce eſt cortex verus (ecorce de Garou) Gallorum et Daphne Laureola, L.

Notwithſtanding I have mentioned three-quarters of an inch ſquare, and the Pharmacopœa Roſſica has preſcribed certain dimenſions neceſſary to the ſize of the piece of bark to be applied, I have never obſerved any general rule in that reſpect, but have varied its ſize according to the age of the patient or ſize of his arm, or to the degree of inflammation and ſuppuration I wiſhed to take place.

If

If theſe trifling Obſervations find room in your reſpectable Medical Miſcellany, I ſhall continue to communicate to you a variety of foreign practice, not generally known in England; or, if known in terms, not frequently in application.

I am, &c.

Great Ruſſel Street, Bloomsbury,
Feb. 16, 1801.

J. ROGERS.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

YOUR impartiality, in admitting into your very intereſting Journal, whatever tends to prove or diſprove the utility of Vaccine Inoculation, deſerves univerſal applauſe.

In your laſt Number appeared a communication from Dr. Woodforde, not of the moſt favourable kind to this queſtion. But, whatever effect it may produce, I am too well acquainted with the author, and with the rectitude of his intentions, to doubt that his motives in publiſhing the caſe were honourable.

In this inſtance, a perſon who was ſuppoſed to have had the Cow-pox twenty-eight years ago, lately had the Small-pox; which, Dr. W. obſerves, ſeems to militate againſt the permanent preventive influence of the Cow-pox.

He ſays, the above hiſtory may be conſidered as an addition to, and illuſtration of, the two caſes communicated by Dr. John Sims in your Journal. It is therefore but juſtice to the new practice to remark, that Dr. S. has, ſince that time, candidly acknowledged, in the ſame Journal, a conviction of his error, confeſſing, he believed the matter uſed in vaccine inoculation, a real preventive of the ſmall-pox. He has alſo ſigned the teſtimonial, which declares, that in the opinion of the phyſicians and ſurgeons, whoſe names are under-ſigned, thoſe who have had the Cow-pox are perfectly ſecure from the future infection of the Small-pox.

The caſe of Mr. Jacobs, publiſhed by Dr. J. Sims, it is now well underſtood, bears no reſemblance to the genuine Cow-pox. It is the ſpurious diſeaſe; againſt which Dr. Jenner cautions every perſon to be on his guard, leſt it ſhould create an idea of ſecurity, which might prove deluſive. But admitting, for the ſake of argument, that the diſeaſe which is related by Dr. W.

ſprung from matter generated in a puſtule, or a ſore, which had originally been of the true vaccine kind; what proof have we that this matter, when it was applied to the hands of the patient, and when it produced puſtules, had not undergone a change? What proof have we, that, when this matter infected the patient in queſtion, it had not degenerated, and loſt all its original properties and ſpecific virtue?

Of ſuch a ſpecies of degeneracy in the *Small-pox*, we meet with numerous inſtances in the works of Dr. Jenner; inſtances which occurred to very reſpectable practitioners, who are now living to ſubſtantiate the facts.

If, then, the permanent preventive influence of the Cow-pox can bear as ſevere a ſcrutiny as that of the ſmall-pox, which I am well perſuaded it can; this is all that the ingenious author of the paper under conſideration, or any other reaſonable and enlightened man, will expect; and if theſe obſervations tend in any degree to diſſipate the doubts which Dr. W's caſe may have excited, I am perfectly convinced no one will read them with more pleaſure than himſelf.

I hope this caſe will induce all medical men to inoculate with matter taken at an early period, and to refrain from the practice of taking it on the fourteenth and fifteenth day. I hope alſo, it will induce thoſe perſons who imagine they have had the caſual Cow-pox, to conſent to be inoculated for that diſeaſe, in order to preſerve them from one infinitely more dreadful; and that my friend, Dr. Woodforde, will prevail on the ſiſter of his patient, to ſubmit once more to this powerful prophylactic. Should it only prove a ſecurity from the Small-pox for eight-and-twenty years more, it is worth while to try it at this time; ſince it is probable, that before the expiration of half that period, the Small-pox will be known in this kingdom only by name.

It is by no means evident, that Dr. W's patient had formerly eſcaped variolous infection, in conſequence of having had the ſuppoſed vaccine diſeaſe; ſince the ſame thing often occurs in thoſe who have never milked a cow, nor been ſuſpected of catching the diſeaſe in any other way. Dr. Bancroft, junior, lately informed me, that his brother was inoculated for the Small-pox eleven times, and once taken to a patient labouring under the diſeaſe, and inoculated in both arms with a large quantity of recent matter; but to no purpoſe: Yet, he afterwards caught the Small-pox in the natural way.

Leaving every one to form his own opinion concerning permanent preventives, I beg leave to conclude with expreſſing my opinion, that if medical men perform their duty, and ſincerely unite in their endeavours to exterminate the diſeaſe, we ſhall not long have occaſion for a permanent preventive, or even for any

any preventive at all; provided care is taken to enforce a proper quarantine, when any veſſel arrives from foreign parts, where that worſt of plagues, the Small-pox, may happen to prevail. I am, &c.

JOHN RING.

New Street, Hanover Square, Feb. 12, 1801.

A Peculiarity in the Course of the Radial Artery, communicated to the Editors by Dr. YELLOLY.

THE diviſion of the Brachial Artery into two branches near the ſhoulder, or in the middle of the arms, is a circumſtance noticed by moſt authors who write on the blood-veſſels, and does not unfrequently occur. I have obſerved, however, a peculiarity in the courſe of the radial artery, which it may not perhaps be improper to notice, as it is not mentioned by Sabatier, Mr. J. Bell, or Prof. Murray, though known to a few gentlemen with whom I have converſed. It is this, that the artery, inſtead of directing its courſe as in the uſual way, on the inſide of the radius, through the whole length of it, ſometimes ſuddenly turns outwards, about an inch above the place at which the pulſe is uſually felt, goes over the bone, and continuing its courſe along the top of, or near the outſide of it, can be diſtinctly felt going deep into the ſpace between the metacarpal bones of the thumb and fore finger. In ſuch caſes, a ſmall branch only is found in the uſual direction of the trunk; and this branch can be traced going towards the palm. It ſeems to anſwer to that which is ſent off about the place at which the radial artery uſually makes its bend outwards, under the tendons of the extenſors of the thumb. I firſt had occaſion to obſerve this luſus naturæ, about three years ago, in a robuſt man, with a recent attack of fever. The pulſe was extremely ſmall, very different from what his general appearance would have led me to expect. That of the other arm was very ſtrong and full. On examining more minutely into the cauſe of this difference, it was found to be what is above ſtated. Since that period, I have ſeen the ſame occurrence in about eight inſtances, one of them in a female, and two in the ſame perſon. Phænomena of this kind afford in general little practical inſtruction. Had I not been aware however of this deviation, I might perhaps, in ſome of the inſtances, have been induced to have drawn a more unfavourable concluſion on the nature of the diſeaſe, than the circumſtances warranted. I am, &c.

Bartlett's Buildings, Feb. 15. JOHN YELLOLY.

CRITICAL RETROSPECT

OF

MEDICAL AND PHYSICAL LITERATURE.

[FOREIGN AND DOMESTIC.]

Einige Krancheiten der Nieren, und Harnblaſe unterſucht und durch Leichen Oefnungen beſtaetigt; i. e. Some Diſeaſes of the Kidneys and Bladder, examined and explained by Diſſections. With thirteen Engravings. By Fr. Aug. Walter, Profeſſor at the Medico Chirurgical College of Berlin. Berlin, for Matzdorf, 1800. 4to. price 1 rixd. 12 gr. or about 5s.

Although the author had previouſly read this work before the Royal Academy of Sciences at Berlin, in whoſe *Memoirs* of the year 1796, it is given in a French tranſlation, yet the ſeparate publication of it in the original language ought to be thankfully received by medical men, particularly as the above *Memoirs* come to the hands of few. Two engravings are alſo added to this publication, which, on account of the intereſting pathological information, and the caſes which are here communicated and explained by inſtructive engravings, (for which purpoſe the author has availed himſelf of his father's cabinet) muſt be conſidered as an important contribution to pathological anatomy. The intereſting contents of this book we ſhall impart to our readers in the following extracts. "Every calculus in the kidneys originates in the interior of them, increaſing from within towards without. Any heterogeneous matter, ſalt, earthy particles, blood, mucus, &c. remaining in one of the *calices* or *infundibula* in the kidneys, and not being carried away through the ureter by urine, cauſes a diſpoſition to a ſtone. For forming ſuch a calculus Nature employs one or ſeveral *calices* or *infundibula*; and ſtones are, as it were, according to certain laws, but rarely generated in the other ſubſtance of the kidneys. The irritation of the foreign body occaſioning a congeſtion of blood at the place of its ſeat, the growth of the calculus is promoted by the adheſion of ſimilar particles. When the calculus is generating more in the middle of the kidneys, ſo as to be capable of extending itſelf equally; when the irritation is not become vehement enough to produce inflammation and ſuppuration, and the corruption of the kidneys proceeds ſlower than the growth of the calculus, this may increaſe to an extraordinary ſize, without the kidneys being in the leaſt morbidly affected. The largeſt calculus of this kind in the collection of Mr. Walter's father, weighed *three ounces and a half and two ſcruples.*

"The

" The gangrene in the kidneys is commonly the consequence of a calculus, but rarely of a previous vehement nephritis; it follows when the inflammation occasioned by the irritation of the calculus extends to the whole substance of the kidneys, and continues a long time in a violent degree, and when the blood stagnates in the vessels; the substance of the kidneys is consumed by suppuration, and the putrid blood becomes extravasated, and is found sometimes quite dissolved.

" *The Dropsy in the Kidneys* is a disease, of which the cause is either to be sought for in the kidneys themselves or in the parts adjacent to the ureter. It is always produced as soon as the passage in the ureter is obstructed; and stones therefore which remain in the ureter and stop it, indurations of the duodenum and pancreas, indurated and enlarged lymphatic glands about the ureters, tumours, &c. dropsies of the *uterus*, of the *ovaria*, and of the Fallopian tubes, may, by compressing the ureters, occasion a dropsy in the kidneys: an inflammation of the ureter is likewise able to cause an obstruction in them, by producing an adhesion of its internal coats. This disease, however, occurs more frequently in females than in males. Stones are seldom the only cause of it, and it happens frequently that they generate by the precipitation of saline and earthy particles, after the obstruction is already established. The kidneys are generally so changed by this disease, that nothing remains of them but the external membrane; and they have from the extending fluidity, the appearance of a bladder. The urine, which on account of the ureter being obstructed, cannot be carried to the bladder, stagnates in the ureter and kidneys, extending them to such a degree that the secretion is at first diminished, and at last entirely destroyed; and instead of urine, nothing but a lymphatic fluid is secerned by the remaining vessels, which, however, never becomes sharp or putrid. It is remarkable, that in a dropsy of the kidneys fat is never found about them, which is always the case when the kidneys are destroyed by a calculus. In some rare cases it has been observed, that an obstruction of the ureter did not produce a dropsy, the urine being evacuated another way, by perspiration, &c.

" The kidneys are likewise consumed, extended and excavated by topical suppuration, that nothing remains of them but the external membrane, and they resemble a bladder. This disease, however, may in some cases be cured, whereas the dropsy in the kidneys is always incurable, and brings on death at last.

" Among the diseases of the urinary bladder, the *calculus* deserves to be first ranked, which in its external appearance differs according to the different mixture of the particles by which it is formed. A *calculus* has its origin, First, in the kidneys, by small stones that have penetrated from thence into the urinary bladder, where they remained: Second, by foreign bodies that happen by any accident to come into the bladder, of which he relates a case of a needle having slipt into the bladder, and given origin to a stone: Third,

it

it generates in the bladder without any other cause, particularly when some mucus, impregnated with earthy or other heavy particles, adheres to single spots of it, where it is incrusted with the different particles of urine; when blood penetrates into the bladder, adhering here and there in small drops, which are involved by the different particles of urine; when a polypous concretion generates in the bladder, which is covered with the particles of urine. In all these cases a calculus is produced, that frequently adheres to the side of the bladder.

"The inflammation of the urinary bladder, from which a great part of its diseases originates, is occasioned by the preternatural want or sharpness of the mucilaginous serum, which moistens the internal surface of the bladder, and defends its nerves against the acrimony of the urine. How copiously this mucus is often secerned, appears in the *calculus*, and in the hæmorrhoids of the bladder. The seat of this disease is in the arteries of the bladder, and particularly in those vessels that secern the above mentioned mucus, whereby the coats of the bladder generally grow very thick, and the numerous veins begin to swell to a considerable degree. It is apparent that this complaint should be otherwise treated, as hæmorrhoids which are produced by an obstructed circulation in the vena portæ, and in the liver. The cavity of the bladder being corroded by the inflammation and suppuration, gives rise to an adherent calculus; for the particles entering into the little cavities and inequalities, precipitate there, and are covered with a preternatural cellular substance, by which means the stone and the bladder become one mass, which no art is able to separate. It seems, however, that a certain disposition is required for this formation of the calculus, because there are instances where, in the largest polypous excrescences in the bladder, no calculus was generated, but the mass increased sometimes by itself to an enormous size. *Mr. Walter* found in the bladder of a woman of forty-five years of age, a flesh coloured fibrous and soft mass, extending to the whole cavity and adhering to its coats. It consisted, according to a chemical analysis, of a gelatinous matter, with some volatile alkali, lime, a little oil, and common salt. In another case, a polypous adhering to the neck of the bladder, had penetrated through the urethra, out of which it hung in the form of a fleshy concretion, without the genitals being in the least injured by it.

"What has been called by *Ruysch scabies interna vesicæ urinariæ*, is nothing but a beginning corrosion of the internal surface of the bladder, occasioned by a violent inflammation.

"One of the most remarkable diseases of the bladder is a hernia or rupture, under which name we understand, when the muscular fibres of the bladder are any where dilated, that the nervous membrane gets through the interstices and forms by extension a sort of bag. It differs from a *prolapsus vesicæ urinariæ*, which takes place when a preternatural extension in any part of the pelvis happens, whereby the bladder comes out at the same time. The disposition to a rupture of the bladder depends on the strength and stiffness

ſtiffneſs of the muſcular fibres: when theſe are rather ſtrong and ſtiff, not eaſily admitting extenſion, ruptures are ſoon brought on, particularly when the bladder is diſtended by a ſuppreſſion of urine. But when the fibres are more flaccid, ſoft, and eaſily yielding, this dangerous caſe rarely happens. Ruptures are particularly dangerous to *calculous* habits, becauſe the ſtone may enter into the cavity formed by the rupture, and become by that means out of the reach of the ſurgeon.

"What the author ſtates of the hernia of the urachus is entirely new; for as the opinion on the urachus was very unſettled, before Mr. Walter's father had more cloſely examined it, ſome taking it for a ligament not capable of extenſion, in which an opening is preternatural, it muſt not be wondered at when no anatomiſt has, previous to Mr. Walter, mentioned a hernia of the urachus. This is only ſhut up by a mechanical conſtriction, and always remains open from the *annulus umbilicalis* to the bladder. As ſoon as the muſcular fibres ſurrounding the entrance of the urachus into the bladder are dilated or weakened, the urine enters into it and extends it to a preternatural ſize, forming by that way a ſort of hernia. When the annulus umbilicalis is not ſtrong enough to reſiſt the urine, it is likewiſe dilated, and either a hernia umbilicalis brought on, or the urine runs out from the dilated urachus."

The Philosophy of Medicine, or Medical Extracts on the Nature of Health and Disease, including the Laws of the Animal Oeconomy, and the Doctrines of Pneumatic Medicine; illuſtrated by plates. By a Friend to Improvements, 4th edit 5 vol. 8vo. each vol. about 600 pages. London, Cox, Symonds, &c. price 3l. in boards.

THE public opinion reſpecting this diverſified work is ſufficiently declared, by the rapidity with which it has gone through the former editions.

Vol. I. Contains the hiſtory of medicine from Hippocrates to the death of Dr. Brown; the hiſtory of chemiſtry to the preſent time; the laws of the animal œconomy, and the "relationſhip we ſtand in to the air we breathe."

Vol. II. Explains our relationſhip to light, heat, food, exerciſe, and all the variety of mental emotion.

Vol. III. Embraces the conſideration of *indirect ſtimuli*, and the diſeaſes of *aſthenia*, or weakneſs.

Vol. IV. Is employed in the conſideration of the effects of exceſſive ſtimuli, and the action of *poiſons*, with their *antidotes*.

And the Vth Vol. contains the riſe and progreſs of *pneumatic medicine*.

The Chemical Pocket-book, or Memoranda Chemica; with Tables of Affinities, or Elective Attractions, &c. &c. By JAMES PARKINSON. 2d Edition. With the lateſt Diſcoveries. 12mo. pp. 260, price 6s. in boards. London, 1801, Symonds, &c.

FOR

For our opinion of this correct and useful work, and of which the public opinion appears by its rapid sale to coincide with our own, see Vol. iv. p. 383.

Observations on the Nature, Causes, Prevention, and Cure of Gout and Rheumatism; to which are annexed, Phænomena Physiologiæ, issuing in the Cure of these Diseases. By William Peter Whyte, 12mo. pp. 125. London, Rivingtons.

The subjects treated of in this small volume are of sufficient importance to excite general attention, and our readers will form an opinion of its merit from the following extracts:

"In his endeavour (says the writer) to develope these causes, the author has deviated from the track usually pursued by professional writers, in order to obtain for the subject, a form of investigation better adapted to the capacities of the generality of readers; a licence which, he trusts, the candid will tolerate.

"Whatever specific denomination any thing operating as a cause of this disease may be technically entitled to, it would seem to derive terror and importance only, as it contributes, in a greater or less degree, to the production or augmentation of that peculiar chemical combination of the animal fluids, on which the disease would appear to depend. This combination seems to be so essential in its nature, that, without it, the disease cannot exist. It is one of those things which invariably go before, and are connected with it. Some authors, however, have questioned the existence of any matter at all, as a cause of this disease; but the irresistible and conclusive evidence, arising from well authenticated facts and from observation, establishes the affirmative. The curious, and the sceptical, may compare the case of Mr. Major Rook, late surgeon and apothecary in Upper Shadwell, reported and published by the late ingenious Dr. Samuel Pye in the London Medical Transactions, and thence copied into the Encyclopædia Britannica, vol. xi. p. 188. edit. 1797; where they may see the tenor of these observations terribly confirmed. What are the nature or physical properties of this matter, is an enquiry more of curiosity to the inquisitive physiologist, than of real utility and interest to the gouty valetudinarian. His attention will rather be directed to the means of eradicating the disease, and of extricating himself from it, if it recur. But, for his general information, we may just observe that the matter of gout would appear to consist, chiefly, in a peculiar modification or combination of the animal fluids, of a specific chemical description; which accumulates, and sometimes concretes, in the body, and produces the various mischiefs this disease unfolds. This is pretty evident from the effects of certain aliments, from some phænomena the disease assumes, and from the analogy it bears to some other complaints. To go more minutely into the nature and properties of it, would be inconsistent with the author's design, and unimportant to the generality of readers.

"The first question, Whence the morbific matter comes, is answered by observing that it must be taken in with our common aliment,

ment, or rather is a part of it; ſince it certainly is not created in the body, nor is it at all probable that we derive it from the atmoſphere: and the notion of a certain *nucleus* or *radical* being propagated from the parent to the offspring, has been long ſince exploded as void of any foundation in Nature. If then the morbific matter be taken into the body with the common aliment, Does every part of it afford the peccant matter equally; or, is the latter in any, and what degree, peculiar to any, and which, particular parts of aliment? A certain ſpecific modification of matter may conſtitute the principal part of the material cauſe of Gout; but, in the aggregate of the animal fluids, there will be different degrees of approximation to it; and in proportion as this is in a greater or leſs degree, the diſeaſe will be more or leſs aggravated. From analogy, and from (what is a much better ground of argument in this caſe) obſervation, it would appear that ſtrong animal food, ſtrong and ſtale, heavy and glutinous fermented liquors, the mixture called punch, refined ſugar, many ſorts of wine, particularly red port and others abounding with acid, are among the moſt active of the chemical agents concerned in forming the morbific combination introductive of the diſeaſe. Theſe would appear to be the principal ſources whence the matter of this diſeaſe is derived: Our next enquiry will be, Why it accumulates in the body?"

Remarks on the Situation of the Poor in the Metropolis, as contributing to the Progress of Contagious Disease; with a Plan for the Institution of Houses of Recovery, for Persons affected with Fever. By Dr. T. A. MURRAY. Publiſhed by the Deſire, and at the Expence of the Society for Bettering the Condition of the Poor. London, 1801, Hatchard. Price 1s.

THE poorer orders of ſociety in great towns are peculiarly the objects of commiſeration; the wretchedneſs of their habitations, and the general appearance of diſtreſs and poverty, ſo often obſerved in them, form a ſtriking contraſt with the eaſe and opulence of the higher ranks. The ſtate in which ſo many of them live, however, goes further than barely the privation of comforts. From the confined and crowded nature of their habitations, contagion is generated and kept alive, and frequently diffuſes its baleful influence far beyond the place of its origin.

Any plan which promiſes to correct an evil of ſo ſerious a nature, and ſo extenſive an operation, cannot fail to meet with that ſupport which its importance deſerves; and we are happy to find, that, from the ſucceſs of an inſtitution eſtabliſhed a few years ago in Mancheſter, excluſively appropriated to the admiſſion of fever patients, the judicious publication before us is likely to call the public attention to the adoption of a *ſimilar plan* in the metropolis.

The Author's introductory obſervations are meant to impreſs upon the public mind, the neceſſity of an inſtitution, ſuch as is propoſed. The poor, from their manner of life, and the crowded and wretched ſtate of their habitations, are peculiarly the objects

of contagious diſeaſes; their dwellings are frequently, on all ſides, ſurrounded by buildings which prevent a free acceſs of air; in a large proportion of them, a houſe contains as many families as rooms; and it is ſtated in the Appendix, on the authority of Dr. Willan, that from three to eight individuals often ſleep in the ſame bed. No means are employed for ventilating the apartments; and when any one of the family is attacked with fever, the wretched and perilous ſtate of the whole can hardly be conceived but by thoſe who have had an opportunity of witneſſing it: The diſeaſe frequently ſpreads from room to room, till the whole neighbourhood have become the ſubjects of its attack; and as no proper means are ever taken to remove the contagion from the walls and furniture of the habitation, a ſource of febrile infection often continues long, and it is to be feared, never entirely diſappears from ſome of the dwellings of the poor.

That many of the preſent evils will be alleviated by the inſtitution of Houſes of Recovery in London, ſeems extremely likely, from the ſtatements which the author has given of the ſucceſs of a ſimilar eſtabliſhment in Mancheſter. The number of fevers in the town, and particularly in the pile of buildings near the Houſe of Recovery, was, in a ſhort time, much diminiſhed; and in the very firſt year, there was a decreaſe of 400 in the Bills of Mortality.

Six inſtitutions, the author thinks, would be neceſſary to extend to every part of the metropolis, the benefits likely to be produced by Houſes of Recovery; he adviſes, however, the eſtabliſhment of one, by way of commencement.

The meaſure here recommended is patronized by a ſociety whoſe peculiar object is to better the condition of the poor; and under its auſpices, and thoſe of the reſpectable medical men* who have given it their ſanction, we have no doubt of its receiving due conſideration.

We ſhall ſubjoin, verbatim, an outline of the plan of ſuch an inſtitution, which the author ſtates to be ſketched entirely on the principles ſo ſucceſsfully applied at Mancheſter.

Outline of a Plan for the Eſtabliſhment of a Houſe of Recovery, for Perſons infected by contagious Fever.

"1. All poor perſons labouring under infectious fever, and reſiding within a mile of the Houſe of Recovery, ſhall be conſidered at the opening of it as proper objects of this charity, but the limits ſhall be enlarged as ſoon as poſſible.

"2. The Houſe to be provided for the reception of ſuch perſons, ſhall be in an airy ſituation; detached from other buildings; in the neighbourhood of a populous diſtrict of the town, and large enough to accommodate as many patients as the funds of the Houſe ſhall, at its

* The author particularizes Sir Walter Farquhar, Dr. Saunders, Dr. Garthſhore, Dr. Willan, and Dr. Ferriar, of Mancheſter.

its opening, be deemed adequate to ſupport. The room ſhall be furniſhed with iron bedſteads and ſtraw-beds.

" 3. Two or more Phyſicians and an Appothecary ſhall be appointed, the latter of whom ſhall reſide near the Houſe.

" 4. The ſervants of the Houſe ſhall conſiſt of a Matron, who ſhall ſuperintend the domeſtic concerns; three ordinary nurſes (until more ſhall be found neceſſary); and a Meſſenger or Porter.

" 5. Upon any application for admiſſion, notice ſhall be immediately given to one of the Phyſicians, who ſhall, as ſoon as poſſible, aſcertain the ſtate of the perſon recommended; and if he deem it expedient that the patient be removed to the Houſe, he ſhall give an order to that effect.

" 6. A ſedan chair, provided with a moveable lining, ſhall be kept at the Houſe, in which all perſons, ordered by the Phyſician to be removed, ſhall be carried thither at the expence of the inſtitution.

" 7. The internal regulations ſhall be ſimilar to thoſe of the Houſe of Recovery at Mancheſter, with the exception of the 11th, 12th, 13th, and 15th, which relate to circumſtances entirely local.

" 8. When the Phyſician ſhall not think the removal of the ſick perſon adviſable; or when the fever ſhall have ceaſed in a dwelling-houſe; he may, with the concurrence of the Committee, order ſuch meaſures as may be conducive to check the progreſs of contagion, or neceſſary to prevent the renewal of its effects. Of this deſcription are white-waſhing and cleaning the apartments; purchaſing new bed-clothes or apparel, when the deſtruction of thoſe infected ſhall have been neceſſary, &c. The expence of ſuch meaſures ſhall be defrayed from the funds of the Houſe."

Medical Enquiries and Obſervations on the Yellow Fever, Gout, and Hydrophobia. By BENJ. RUSH, M. D. Vol. V. 8vo. pp. 236. London, Mawman, late Dilly, price 5s. in boards. See Journal, Vol. I. p. 105, and Vol. II. p. 376.

Three Lectures upon Animal Life. By BENJ. RUSH, M. D. 8vo. pp. 84. price 2s. 6d. London, Mawman. For an Account of theſe intereſting Lectures, ſee Journal, Vol. III. pp. 184 and 283, &c.

We have introduced the Titles of theſe two valuable Works, for the ſake of informing our Engliſh Readers where they may find them in London.

Obſervations upon the Origin of the malignant Bilious or Yellow Fever in Philadelphia; and upon the means of preventing it. By BENJ. RUSH, M. D. Philadelphia, 1799, 8vo. pp. 28, price 1s. London, Mawman.

In this philanthropic pamphlet, Dr. R. adheres to his former opinion reſpecting the domeſtic origin of this ſcourge of the weſt-

ern world. Reſpecting the *remote Cauſes* of the yellow fever, Dr. R. agrees with Dr. Jackſon and the beſt informed Europeans, that it is the "offſpring of putrid vegetables and animal exhalations in all countries."

"The ſources of it in Philadelphia are chiefly the following."—1. The docks; 2. The foul air of ſhips; 3. The common ſewers; 5. Dirty cellars and yards; 6. Privies; 7. The putrifying maſſes of matter which lie in the neighbourhood of the city; and 8. Impure pump water.

Dr. R. next explains the concurrent ſtate of the weather neceſſary to the production of the epidemic; and obviates ſeveral objections. He then examines the following intereſting queſtions, viz. "*Is the yellow fever a contagious diſeaſe? Can the yellow fever be imported?*" And he infers the *negative* in both inſtances.

The Plague not contagious, or a Diſſertation on the ſource of epidemic and peſtilential Diſeaſes. By CHARLES MACLEAN, M. D. 8vo. pp. 49, price 2s.—London, Murray and Highley.

THIS moſt important of all medical inquiries, at this moment engages the attention of ſo many diligent, able, and impartial inveſtigators in every quarter of the world, that we may daily expect to ſee the limits of our confined knowledge conſiderably extended. In the mean time we ſhould neither be "too raſh nor diffident."

Practical Obſervations on the Inoculation of the Cow-pox, &c. By JOHN ADDINGTON, Surgeon, 8vo. pp. 52, price 1s. 6d.—London, Johnſon, &c.—Birmingham, Belchers, &c.

IN the adverti ſement prefixed, the author ſays, "Since the deſign and plan of this little Eſſay were entered upon, a publication has appeared from Mr. C. R. Aikin, which, in a certain degree, muſt be allowed to ſuperſede its purpoſe. Notwithſtanding, however, the obvious ſimilarity in the ſcheme and intention of the two works, the preſent has not been abandoned nor its arrangement altered:—for two reaſons:—one part of the author's deſign cannot poſſibly be interfered with by the production of another perſon; viz. that of contributing in the proportion which his ſhare of experience affords, to the general ſtock of knowledge extant on the ſubject. The other, which is that of promoting an enquiry allowed to be univerſally intereſting; when undertaken by different perſons in their reſpective ſpheres, and by the means they ſeverally judge proper; is rather an affair of co-operation than of interference.

"In purſuance of theſe deſigns, eſpecially the latter, the author has been led into a minuteneſs of detail, which were this part of the eſſay addreſſed to thoſe who are already converſant with the ſubject, would require an apology,—by others it will be deemed unneceſſary."

We find ſufficient diligence and obſervation in this popular pamphlet, to induce us to recommend it to our readers and the public in general.

An

An Account of the Nature and Effects of the Cow-pock, &c. By JOHN MILNER BARRY, M. D. 8vo. pp. 45.—Cork, Harris.

This ſhort pamphlet contains a number of facts and caſes which we wiſh to recommend to the peruſal of our readers. The following opinion we think ſhould be generally underſtood. "The frequent occurrence of the *Scrophula* or Evil, after the ſmall-pox, has given riſe to a well-known popular prejudice, that the poiſon of the ſcrophula has been communicated with that of the ſmall-pox, from one family to another. Whatever reaſon there may be to doubt this opinion, from a conſideratiou of the laws of the animal economy, yet, its being ſo very general, proves the frequent appearance of the ſcrophula, after the ſmall-pox, where no pre-diſpoſition to it had before exiſted. From an obſervation of this fact, and hiſtorical reference to the period when ſcrophula was firſt known in Europe, it has been ſuſpected that this diſeaſe was primarily occaſioned, and is ſtill continued by the ſmall-pox.

"It is not the leaſt valuable characteriſtic of the cow-pock, that no ſcrophulous ſwellings of the glands of the neck, or other ſcrophulous affection, has been known to follow it in any of the numerous perſons hitherto inoculated. With what additional pleaſure we ſhall contemplate this diſcovery, if, by the more general extenſion of the vaccine inoculation, we ſhall, with the ſmall-pox, exterminate another loathſome diſtemper, in its ultimate effects no leſs fatal, and from its ſuppoſed hereditary nature, infinitely more dreaded than the ſmall-pox.

A Familiar Treatiſe on the Phyſical Education of Children during the early period of their Lives; tranſlated from the German of C. A. Struve, M. D. to which are prefixed, three introductory Lectures on the ſame ſubject. By A. F. M. WILLICH, M. D. author of the Lectures on Diet and Regimen, &c. &c. 8vo. pp. 450, Price 8s. —London, Murray and Highley.

THE author, in his ſhort preface, obſerves, that "the early education of youth has a more important influence on the health and happineſs of man, than is generally imagined. As, at this period of our exiſtence, the foundation is laid, either for irremediable debility, or for mental and bodily vigour, it requires conſtant care, and indefatigable perſonal attention. Nature has intruſted that office chiefly to mothers. To thoſe noble guardians of infancy, who liſten to her voice, I preſume to dedicate a work containing principles, by a proper application of which, they will not only become happy themſelves, but likewiſe train up cheerful and healthy children.

"There ſubſiſts an indiſſoluble connection between phyſical and moral education: if we attend merely to the former, our duty will be imperfectly performed; nor is it poſſible to attain any degree of perfection in the latter reſpect, without paying a due regard to the treatment of the body, leſt we ſhould be ill prepared to encounter the turbulent viciſſitudes of human life. Perhaps, by combining both objects, I have been enabled to reduce the preſent Treatiſe to

that ſtate, in which it may claim the ſuffrages of an indulgent public."

Of the three introductory lectures, the firſt contains " An hiſtorical ſketch of the manners and cuſtoms prevailing among different nations; hints and remarks on their phyſical character, as well as occaſional obſervations on their moral ſtate: together with an inquiry into the truth of the ſuppoſed degene acy of the preſent age, when compared with the condition of our anceſtors."

The ſecond is " On the errors and prejudices prevailing in the treatment of Children, at an early age; on the dangers attending the improper application of medical remedies in general; hints towards radical, but gradual improvements; and ſatisfactory proofs that we are not yet in the poſſeſſion of a ſyſtem, founded on ſcientific principles, ſupported by experimental facts, and conſiſtent with the moral and phyſical conſtitution of man.

The third introductory lecture contains, " Strictures on ſeveral modern ſyſtems of education, eſpecially that of ROUSSEAU; a curſory review of their merits and defects, exemplified by a variety of ſtriking inſtances; an abſtract of Profeſſor HUFELAND's opinions relative to the food and drink, ſleep and cries, of children.

As a ſpecimen of theſe lectures we ſhall ſelect the directions reſpecting drink and ſleep.

" With reſpect to *Drink*, Prof. HUFELAND is decidedly againſt giving it to children in large quantities, and at irregular periods, whether it conſiſt of the mother's milk, or any other equally mild liquor. It is improper and pernicious to keep infants continually at the breaſt; and it would be leſs hurtful, nay even judicious, to let them cry for a few nights, rather than to fill them inceſſantly with milk, which readily turns ſour on the ſtomach, weakens the digeſtive organs, obſtructs the meſenteric glands, and ultimately generates ſcrophulous and ricketty affections. In the latter part of the firſt year, pure water may occaſionally be given; and if this cannot be procured, a light and well-fermented table-beer might be ſubſtituted. Thoſe parents who accuſtom their children to drink water only, beſtow on them a fortune, the value and importance of which will be ſenſibly felt through life. Many children, however, acquire a habit of drinking during their meals; it would be more conducive to digeſtion, if they were accuſtomed to drink only after having made a meal. This uſeful rule is too often neglected, though it be certain that inundations of the ſtomach, during the maſtication and maceration of food, not only vitiate digeſtion, but they may be attended with other bad conſequences; as cold drink, when brought in contact with the teeth previouſly heated, may eaſily occaſion cracks or chinks in theſe uſeful bones, and pave the way for their carious diſſolution.

" OF SLEEP.—Infants cannot ſleep too long; and it is a favourable ſymptom, when they enjoy a calm and long-continued reſt, of which they ſhould by no means be deprived of, as this is the greateſt ſupport granted to them by Nature. A child lives, comparatively, much faſter than an adult; its blood flows more rapidly;

pidly; every ſtimulus operates more powerfully; and not only its conſtituent parts, but its vital reſources alſo, are more ſpeedily conſumed. Sleep promotes a more calm and uniform circulation of the blood; it facilitates the aſſimilation of the nutriment received, and contributes towards a more copious and regular depoſition of alimentary matter, while the horizontal poſture is the moſt favourable to the growth and bodily developement of the child.

" Sleep ought to be in proportion to the age of the infant. After an uninterrupted reſt of nine months in the ſtate of a fœtus, this ſalutary refreſhment ſhould continue to fill up the greater part of a child's exiſtence; and Prof. HUFELAND affirms, that a continued watchfulneſs of twenty-four hours would prove deſtructive. After the age of ſix months, the periods of ſleep, as well as all other animal functions, may in ſome degree be regulated; yet, even then, a child ſhould be ſuffered to ſleep the whole night, and ſeveral hours both in the morning and afternoon. Mothers and nurſes ſhould endeavour to accuſtom infants, from the time of their birth, to ſleep in the night preferably to the day, and for this purpoſe they ought to remove all external impreſſions which may diſturb their reſt, ſuch as noiſe, light, &c. but eſpecially not to obey every call for taking them up, and giving food at improper times. After the ſecond year of their age, they will not inſtinctively require to ſleep in the forenoon, though after dinner it may be continued to the third and fourth year of life, if the childs ſhews a particular inclination to repoſe; becauſe, till that age, the full half of its time may ſafely be allotted to ſleep. From that period, however, it ought to be ſhortened for the ſpace of one hour with every ſucceeding year; ſo that a child of ſeven years old may ſleep about eight, and not exceeding nine hours: this proportion may be continued to the age of adoleſcence, and even manhood.

" To awaken children from their ſleep with a noiſe, or in an impetuous manner, is extremely injudicious and hurtful: nor is it proper to carry them from a dark room immediately into a glaring light, or againſt a dazzling wall; for the ſudden impreſſion of light debilitates the organs of viſion, and lays the foundation of weak eyes, from early infancy.

" A bed-room, or nurſery, ought to be ſpacious and lofty, dry, airy, and not inhabited through the day. No ſervants, if poſſible, ſhould be ſuffered to ſleep in the ſame room, and no linen or waſhed clothes ſhould ever be hung there to dry, as they contaminate the air in which ſo conſiderable a portion of infantine life muſt be ſpent. The conſequences attending a vitiated atmoſphere in ſuch rooms, are various, and often fatal. Feather-beds ſhould be baniſhed from nurſeries, as they are an unnatural and debilitating contrivance. The windows ſhould never be opened at night, but left open the whole day, in fine clear weather. Laſtly, the bedſtead muſt not be placed too low on the floor; nor is it proper to let children ſleep on a couch which is made without any elevation from the ground; becauſe the moſt mephitic and pernicious ſtratum of air in an apartment, is that within one or two feet from the floor,

floor, while the moſt wholeſome, or atmoſpheric air, is in the middle of the room, and the inflammable gas aſcends to the top.

" Having, in theſe Introductory Lectures, treated of almoſt every ſubject which appeared to me of eſſential conſequence in the general management of education, I cannot in this place extend my obſervations and remarks, without encroaching upon the limits of the following Treatiſe. And as Dr. STRUVE will ſometimes be found either obſcure, or apparently differing from the peculiar methods of educating children adopted in this country, I ſhall, on ſuch occaſions, endeavour to illuſtrate the ſubject by explanatory notes. At preſent, I cannot conclude theſe preliminary labours in words more appropriate than thoſe of Mr. MALKIN:

" In the progreſs of education, difficulties multiply; but in its firſt periods, the rules to be obſerved are ſimple and eaſy, if ſteadily purſued. To dedicate a cloſe attention to ſuch a regimen as may promote the health, ſtrength, and growth of the body; to operate by gentle progreſſion upon the tender intellect; to exhibit the equability of an amiable temper, and preclude the approach of dangerous example; above all, to perſevere in a calm and uniform method, through the courſe of didactic and moral diſcipline; theſe are the requiſites for diſcharging the parental office with fidelity and ſucceſs.

Our readers will readily appreciate the merit and ſolidity of Dr. STRUVE's Work by the following extracts:

" Whatever attention and trouble parents beſtow on their progeny, during the firſt years of infancy, may be conſidered as a legacy bequeathed to them for life. It is in this firſt ſtage of education, that the human creature is qualified to become a fit inhabitant of the world. Mothers, therefore, have great and important duties to perform, as they are by Nature appointed to regulate the earlieſt attempts made in education; though their merits, in this reſpect, are not ſufficiently acknowledged and rewarded. A mother, who educates her child in a rational manner, is an ornament to her ſex. The greateſt charms and dignity of a woman, are derived from her maternal office; and a good mother equally deſerves the affection of her huſband, and the eſteem of the world."

" Endeavour to harden the body, but without reſorting to any violent means. Before the human frame has acquired a ſettled conſtitution, it may more eaſily and ſafely be habituated to external impreſſions; for, at a later period, every ſudden change might be attended with dangerous conſequences. A child is conſtitutionally weak and irritable to a high degree: hence we ſhould endeavour to ſtrengthen and diminiſh this irritability, in order to procure it the greateſt happineſs of life, a firm body, which may reſiſt all the influence of air and weather. Such a management is highly advantageous, as it will enable children, when adults, to ſupport every ſpecies of fatigue and hardſhip.

" The plan of hardening children may, however, be eaſily carried to exceſs, eſpecially if we are miſled by the advice of pedagogues, who

who are not sufficiently acquainted with the physical nature of the human frame. An extravagant attempt to strengthen youth, deprives them of their natural susceptibility of excitement, renders them insensible, and produces all the bad effects before mentioned: they acquire only a temporary energy, which decreases as they advance in years, and is attended with an early loss of their premature vigour. Parents, therefore, cannot be too seriously cautioned against such mischievous experiments, though they are anxiously recommended by modern authors: good mothers are entreated to peruse their works with circumspection.

"Among the practices before alluded to, are principally included the cold bath, and violent bodily exercise; both of which are often carried to extremes. People do not reflect, that the exertion of the bodily as well as the mental powers, ought not to be inordinate. They have been justly warned against excesses committed with respect to the latter, while similar irregularities still prevail in the exercise of the former.

"Attention should also be paid to the state of the child's body; as feeble children require the greatest precaution in habituating them to external impressions.

"All attempts to render children hardy, must be made by gradual steps. Nature admits of no sudden transitions. For instance, infants should by imperceptible degrees be inured to the cool, and then to the cold bath; at the same time, attention must be paid to their previous management. If they have hitherto been accustomed to an effeminating treatment, and should be suddenly subjected to the opposite extreme, such a change would be attended with danger.

"Lastly, from what has been already observed, it is evident that when children have once been accustomed to a hardy system of education, such a plan must be strictly adhered to.

"All violent impressions on the senses and the body of children, ought to be carefully avoided. It is injurious to toss them about with rapidity in the arms. Loud crying, or shouting in their ears, discharging fire arms, presenting glittering objects to their view, as well as sudden and too great a degree of light, are equally injurious. Thus infants are frequently stupified and affrighted; the brain is shaken in the most detrimental manner; and hence arise the most distressing consequences. On such occasions, we cannot bestow too much attention to the conduct of wet-nurses, or servants. I knew a simple man, who resorted to the absurd practice of placing himself over the cradle, and making a horrible noise, with a view to intimidate, and silence the crying infant. A child, however, ought to enjoy the most perfect rest and composure, if it be our wish to promote sound sleep, regular growth, and its consequent prosperity.

"It is equally detrimental to both mind and body, when infants are continually carried about on the arm of the nurse, teazed with loud soliloquies, prayers, or other mechanical prattling; and especially when they are incessantly provoked to display their anger

or revenge. Such conduct is neceſſarily attended with pernicious effects, while it prevents the ſpontaneous expanſion of infantine powers, blunts their ſenſes, and is ultimately productive of nervous and muſcular debility: a proof how imperfectly we are acquainted with Nature, and how little we are accuſtomed to reflect that the tender nerves of children muſt experience a violent ſtimulus from impreſſions, to which an adult may be habituated, or which do not ſenſibly affect him.

" The bodily education of boys and girls ought in every reſpect to be uniform. A great difference uſually prevails in the education of both ſexes during infancy; a diſtinction which, unfortunately, is the offspring of prejudice, and on that account, female children are cruelly neglected. Parents, being too anxious for the accompliſhment of girls, imagine that they muſt be kept under a certain reſtraint. Boys, in general, are not laced, but poor girls are compreſſed tight enough to ſuffocate them; becauſe it is erroneouſly ſuppoſed, that this injudicious practice contributes to an elegant ſhape, though, ultimately, the contrary effect is obvious; as it is the ſureſt way of making children round-ſhouldered and deformed. Girls are, from their cradle, compelled to a more ſedentary life; and, with this intention, dolls, and other play-things, are early procured; yet boys are permitted to take more frequent exerciſe. Thus, girls are confined in their apartments, while boys amuſe themſelves in the open air. Such abſurd conſtraints impede the free and progreſſive evolution of the different faculties inherent in the human mind. If, therefore, it be our wiſh to educate healthy wives and happy mothers, it is indiſpenſibly neceſſary to treat the female ſex, as well as the male, in a manner equally conſiſtent and rational."

MONTHLY REPORT of DISEASES,

Admitted under the Care of the PHYSICIANS of the FINSBURY DISPENSARY, St. John's Square, Clerkenwell.
From Jan. 20, to Feb. 20, 1801.

	No. of Caſes.		No. of Caſes.
Hypochondriaſis and Dyſpepſia	36	Continued Fever	46
Aſthenia	59	Eryſipelas	7
Hyſteria	2	Cynanche Tonſillarum	2
Epilepſy	1	Pneumonia	1
Vertigo	1	Phthiſis Pulmonalis	4
Cephalæa	3	Cough and Dyſpnœa	23
Anaſarca	5	Diarrhœa	14
Infantile Diſeaſes	23	Chloroſis and Amenorrhœa	19
Chronic Eruptions	19	Menorrhagia	10

It is generally ſuppoſed that what are called nervous affections are almoſt excluſively confined to the ſuperior orders of ſociety: ſo

so far, however, from being the exclusive property of the rich and the luxurious, they appear, in some shape or other, to prevail in an equal proportion among the humblest classes of the community. The nerves of the poor are subject to the same morbid vibrations, and their imaginations to as great a variety of ridiculous and tormenting caprices, as even those are liable to that move in the very highest circles of the fashionable world. Cases of this description, so great a number of which have come under observation during the last year, have been remarkable for the multiplicity and diversity of their symptoms. Some have apprehended the near approach of death, when, to an impartial observer, they shewed every symptom that could indicate health, or that could give a promise of longevity. Some were continually haunted by frightful spectres; some fancied that there was something alive within them*; others, that they had no inside; as well as a great number of corporeal deficiencies and complaints which were entirely absent, and the presence of which there was not the slightest reason for suspecting.

No man has greater opportunities of observing the connection between the prevailing diseases and the various states of the weather, than the physician whose humanity or professional duty calls him to the relief of those classes of society which are most exposed to its influence. It is the peculiar privilege of Dispensary-practice that, being conducted upon a scale of vast extent, it presents an immense multitude of facts, from which this connection may be easily and satisfactorily traced. To note the effects of climate on the human frame, an enquiry of no less importance in a moral than in a physical point of view, is therefore the especial province of the practitioner, to whom this ample field of observation lies open. The general conclusion that will be found to result from the enquiry is, that no state of weather is equally salutary to every variety of constitution, or conducive to the relief of every species of complaint. A mild winter, by removing many causes of illness to which the poor are particularly exposed, is extensively beneficial; while, on the other hand, it is injurious almost to an equal extent, by impairing the vigour of the frame, and thus predisposing it to the long train of disease to which debility is the source.

The extraordinary warmth of the present winter, which has in some measure disturbed the natural order of the seasons, has occasioned a corresponding deviation in the usual course and succession of diseases. As the protracted autumn had prolonged the disposition to contagious fever, so the premature revival of spring has diminished the frequency and softened the severity of pulmonary complaints.

The late frost has scarcely been of sufficient continuance to arrest

* In one or two female cases, indeed, it turned out that *this* fancy was not altogether without foundation.

the progress of febrile infection. Seldom, indeed, does the sudden occurrence of great cold, after a fever has once taken full possession of the constitution, immediately tend to mitigate the violence of its symptoms. This fact may, perhaps, admit of explanation, when we consider the rooted prejudice of the lower classes in favour of accumulating warmth around a sick bed. Cold weather being always more severely felt on its sudden arrival, than when a gradual approach has prepared for the encounter, will tend, in the former case, to inspire additional anxiety to obtain effectual protection against its attacks. The wretched patient, wasting under a burning fever, will often be overwhelmed, by the too officious care of his relations, with a superfluous load of bed-cloaths, and defended, with ill-judged zeal, from the salutary renewal of air. Heat, thus artificially excited, expends in fruitless waste the last remains of vitality; and an atmosphere, thus stagnant and replete with poison, more fatally malignant than the disease, extinguishes in silence the dimly glimmering flame of life.

Pulmonary complaints have been more frequent since the late alteration in the weather. Few diseases require more sagacity in detecting their nature, or greater accuracy in discriminating their varieties, than those that affect the organs of respiration: in none is it of greater importance that the diagnosis should be just. No mistake is more likely to be attended with such fatal consequence to the life of the patient than an error of judgment with regard to this particular. The same remedy, which will in one case save, would, if applied in another, inevitably destroy. Great attention is requisite to recognise the slow and insidious approach of peripneumonia notha; a disease, which, in this city, so often supervenes upon an ordinary catarrh. Hackney-coachmen are peculiarly liable to its attacks. Exposed to all the vicissitudes of an inconstant climate, with little general exercise of body, and with none that tends to preserve the feet in a due degree of warmth, it frequently in them assumes the leading characters of the true pleurisy. A physician, who was to have recourse to the lancet, would learn too late, by the aggravation of every symptom, and the speedy death of his patient, the fatal and irretrievable error he had committed. Bleeding is a remedy seldom applicable to the diseases which afflict the poor of the metropolis. Their general character has been for a long time past complicated with symptoms of debility. Of late, indeed, many causes have conspired with the warmth of the season, to enervate the once robust habits of our countrymen. Those circumstances which produced such ravages in former years, have, it is true, operated with inferior force. But little has it availed the poor that they have experienced less inclemency from the elements, while at the same time they have wanted internal support, as well as exterior protection against the vicissitudes of our atmosphere. They have had to struggle with an unprecedented degree of hunger, anxiety, and fatigue. Under the accumulated pressure of hardships like these, is it to be wondered at that disease has spread so widely, and yielded so many victims to the grasp of death? Is it to be wondered at that the mournful

mournful catalogue of infirmities, which each ſucceeding period obtrudes upon our view, ſhould in every ſeaſon, and in every country, ſtill preſent the ſame picture of calamity, ſtill rehearſe the ſame endleſs tale of human miſery?

Red Lyon Square. J. R.

Account of Diſeaſes in an Eaſtern Diſtrict of London, from the 20th of January to the 20th of February, 1801.

	No. of Caſes.		No. of Caſes.
ACUTE DISEASES.		Hyſteria	4
Typhus	17	Cephalæa	7
Pneumonia	4	Hemiplegia	2
Erypſielas	1	Vertigo	5
Cynanche Tonſillaris	2	Fluor Albus	6
Dyſenteria	2	Dyſuria	4
CHRONIC DISEASES.		Lumbago	2
Cough	20	Rheumatiſmus	23
Dyſpnœa	12	PUERPERAL DISEASES.	
Cough and Dyſpnœa	15	Low Puerperal Fever	3
Catarrhus	4	Dolores Poſt Partum	5
Hæmoptyſis	3	Maſtodynia	4
Hydrothorax	5	Menorrhagia Lochialis	6
Aſcites	2	INFANTILE DISEASES.	
Anaſarca	7	Aphthæ	7
Gaſtrodynia	15	Diarrhœa	12
Enterodynia	17	Dentition	3
Diarrhœa	20		

It will appear from the annexed Liſt, that a fever, which has for ſome time been conſidered as the prevailing epidemic, ſtill continues to hold a diſtinguiſhed place in the catalogue of diſeaſes. It has been repeatedly remarked, that a great determination to the head forms a diſtinguiſhing characteriſtic of this fever. Affections of the head have appeared under different forms, and in various degrees; in ſome of the caſes there has been ſo fierce a delirium, as to give the diſeaſe the appearance of phrenitis: The mode of its approach alſo, was frequently ſuch as to indicate a diſeaſed ſtate of the brain; and ſo great was the torpor of the mental faculties, that it was difficult to rouſe the attention to any object, or when rouſed, to engage it for a ſufficient length of time to anſwer any purpoſe. After a reply to any queſtion, which was made with a degree of quickneſs, the patient returned to a ſtate of ſullen inattention, and the countenance indicated diſpleaſure at being taken notice of, or rouſed to any exertions. Theſe ſymptoms bearing a near reſemblance to thoſe which frequently occur previouſly to an attack of mania, naturally produced an alarm reſpecting the future ſtate of the patient's mind; but being ſucceeded by

by more evident ſymptoms of febrile action, this apprehenſion gradually ſubſided. In ſome caſes the returns of furious paroxyſm were ſo frequent and ſo violent, that it became neceſſary to place the patient under reſtraint, and a ſtraight waiſtcoat was found a convenient mode of preventing his doing miſchief to himſelf, or his attendants. In two or three of the caſes referred to, an eruption appeared on different parts of the body, very much reſembling that of the meaſles, but without producing any particular change in the ſtate of the diſeaſe. In one of the caſes which proved fatal, there was a conſiderable rigidity of the muſcles of the jaw, ſo that it was with difficulty that the neceſſary food, or medicine, were conveyed to the ſtomach.

It may be hoped that the change which has lately taken place in the temperature of the atmoſphere, will produce a favourable change in the ſtate of this diſeaſe: On the other hand, we have reaſon to fear, that it will occaſion a leſs pleaſant alteration in the ſtate of pneumonic diſeaſes, which begin already to increaſe in their number, and to be attended by an aggravation of ſymptoms.

The DISEASES and CASUALTIES for the YEAR 1800.

Abortive and Stillborn	492	Gravel, Stone, and Stranguary	16	Surfeit	2
Abſceſs	37	Grief	5	Swine Pox	1
Aged	1742	Headmouldſhot, Horſeſhoehead, and Water in the head	80	Teeth	414
Ague	2	Head-ach	2	Thruſh	33
Apoplexy & Suddenly	252	Jaundice	67	Vomiting and Looſeneſs	2
Aſthma and Phthiſic	801	Jaw Locked	1	Worms	15
Bedridden	3	Inflammation	593		
Bleeding	9	Leproſy	1	Broken Limbs	9
Burſten and Rupture	15	Lethargy	2	Bruiſed	4
Cancer	58	Livergrown	3	Burnt	12
Chicken Pox	1	Lunatick	162	Drowned	124
Childbed	164	Lumbago	1	Exceſſive Drinking	12
Colds	27	Meaſles	395	Executed *	19
Colick, Gripes, and Twiſting of the Guts	11	Miſcarriage	4	Found Dead	10
Conſumption	5721	Mortification	242	Fractured	1
Convulſions	4512	Palpitation of the Heart	2	Frighted	2
Cough, and Hooping Cough	380	Palſy	122	Frozen	2
Cow Pox	1	Pleuriſy	37	Killed by Falls and other Accidents	62
Cramp	3	Quinſy	1	Killed by Fighting	3
Croup	13	Raſh	1	Killed themſelves	29
Dropſy	1003	Rheumatiſm	4	Murdered	4
Eaten by Lice	1	Scurvy	5	Poiſoned	2
Evil	6	Small Pox	2409	Scalded	6
Fevers of all kinds	2712	Sore Throat	1	Shot	1
Fiſtula	6	Sores and Ulcers	8	Smothered	1
Flux	9	Spaſm	2	Starved	8
French Pox	27	Stoppage in the Stom.	8	Suffocated	3
Gout	105			Total	314

Increaſed in the Burials this Year 4934.

* *There have been executed in Middleſex and Surry 27; of which number (19 only) have been reported to be buried (as ſuch) within the Bills of Mortality.*

Chriſtened

Chriſtened	Males - 10112 Females - 9064	In all 19176
Buried	Males - 11605 Females - 11463	In all 23608

Whereof have died,

Under Two Years of Age - -	6657	Seventy and Eighty - - - -	1459
Between Two and Five - - -	2553	Eighty and Ninety - - - -	655
Five and Ten - - - - - -	848	Ninety and a Hundred - - -	97
Ten and Twenty - - - - -	710	A Hundred and One - - - -	1
Twenty and Thirty - - - -	1582	A Hundred and Four - - -	2
Thirty and Forty - - - - -	2055	A Hundred and Six - - - -	1
Forty and Fifty - - - - -	2308	A Hundred and Seven - - -	1
Fifty and Sixty - - - - -	2163	A Hundred and Eighteen - -	1
Sixty and Seventy - - - -	1973	A Hundred and Twenty - - -	2

MISCELLANEOUS INTELLIGENCE.

The Royal Society of Sciences, at Gottingen, has received a preſent from Dr. Beer, oculiſt at Vienna, of three very maſterly drawn anatomical pathological figures of a remarkable degeneration of both kidneys, which was found in the hoſpital of Vienna, in the body of a young man, who had for a long time ſuffered a diabetes. The kidneys were extended by hydatids contained in their interior ſubſtance to ſuch a monſtrous ſize, that each was one foot long, and ſeven inches broad, and the ureters were of the ſize of a thumb. The chief drawing of the fore part is moſt admirably coloured, and the back part excellently drawn in black chalk. The preparation itſelf is preſerved in the Pathological Muſeum of the Hoſpital, and Profeſſor Frank intends to give a full account of this remarkable caſe.

According to the experience of Dr. Durr, the ſolution of muriated barytes, or terra ponderoſa ſalita, has in ſome caſes a remarkable effect upon the pulſe, and the circulation of the blood. In a ſcrophulous woman of nineteen years, forty drops of a ſolution of muriated barytes, prepared after Hufeland's preſcription, produced a conſiderable heat over the whole body, which ceaſed after being leſſened by degrees.—In a doſe of twenty-five or thirty drops, it cauſed in a young married man nocturnal pollutions, whenever he had taken it during day-time. It is probable that this effect is owing to the diuretic powers of this remedy. (Hufeland's Practical Journal, Vol. 9. No. 3.)

The ſame gentleman obſerved in two caſes, that after the ceſſation of the fluxus menſium, which had appeared rather diſorderly and in long ſpaces of time, a very ſtrong ſudor pedum enſued, combined with a moſt diſagreeable ſmell which went away by degrees, as ſoon as the fluxus menſium was re-eſtabliſhed; but inſtead of it an acrimony in the ſtomach was brought on, which could by no remedies

medies be ſubdued. Dr. D. is in general of opinion, that in the inveſtigation of chronical diſeaſes of the head and ſtomach, that circumſtance, *viz.* ſudor pedum, is not ſufficiently regarded. He relates a caſe, where, after a cuſtomary ſudor pedum had been repelled by bathing the warm perſpiring feet in cold water, the four back teeth of the right ſide of the maxilla inferior fell out without any other perceptible cauſe, and without much pain, and an efflux of a puriform matter was occaſioned, which laſted a long ſeries of years, till the death of the patient. (*Ibid.*)

The New Inoculation having been ordered throughout his Majeſty's Navy, by the authority of the Right Honourable the Lords Commiſſioners of Admiralty, the medical officers, with becoming public ſpirit, to commemorate this event, have voted a GOLD MEDAL, with appropriate devices, to be preſented in their name to Dr. JENNER, as a token of the value with which they regard his profeſſional labours, and the good which mankind is likely to derive from the Vaccine practice.

Certus enim promisit Apollo. A Medal of exquiſite workmanſhip is now executing by an eminent artiſt; the particulars of which, with a liſt of the naval medical gentlemen, we hope to be able to preſent to our readers in ſome future Number of our Journal.

Dr. NISBET has in the preſs a ſyſtematic work on DIET. It will include the application of all the modern diſcoveries in chemiſtry and medicine to this important ſubject, and will be written in a familiar ſtyle, adapted as well to the uſe of families and unprofeſſional readers, as to gentlemen of the medical profeſſion. Such a book has long been a deſideratum, as the few books exiſting which notice articles of diet, are either out of date or mixed with much extraneous and uſeleſs matter.

Dr. BATTY will begin his Courſe of Lectures on the Theory and Practice of Midwifery, and on the Diſeaſes of Women and Children, on Monday, March 23, at half paſt ten o'clock in the morning, at his houſe, No. 6, Great Marlborough Street.

Mr. MACARTNEY began a Courſe of Lectures upon Comparative Anatomy, at St. Bartholomew's Hoſpital, on Thurſday the 19th of February, which will be concluded early in May.

Mr. Fox commenced his Lectures on the Structure and Diſeaſes of the Teeth, on Friday, February 7, at half paſt ſix o'clock. The Lectures are delivered near St. Thomas's and Guy's Hoſpitals. Particulars may be known of Mr. Fox, No. 54, Lombard Street.

TO CORRESPONDENTS.

The original Communications, as usual at this time of the year, have been so numerous, that we have been compelled to postpone the insertion of several valuable Papers, Accounts of Books, Hints, &c.

THE

Medical and Phyſical Journal.

VOL. V.] APRIL, 1801. [NO. XXVI.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

AS the public attention is juſt now attracted towards a Plan for the eſtabliſhment of receiving Houſes for ſick and convaleſcent Poor in the Metropolis, it is but an act of juſtice due to the Public, as well as to the original Projectors of a ſimilar plan, that it ſhould be alſo made known, in order that powerfully benevolent men ſhould avail themſelves of whatever good may be contained in the unpubliſhed ſcheme alluded to.

In the ſpring of 1798, the following project for inſtituting a Convaleſcent Aſylum, under the auſpices of the Governors of the three Hoſpitals of Weſtminſter, St. George's, and the Middleſex, was laid before a few of my particular friends,* by whoſe co-operation many of the details for conducting the Inſtitution were drawn up, and the whole affair ſeemed ripe for promulgation, when the conſideration of the peculiar ſituation of the country, and the financial limitations impoſed even upon the opulent, deterred us from making any further attempt. In addition to this, another very powerful obſtacle aroſe, which effectually checked me, as the original projector, in my future proceedings; and this was, the ſure proſpect of all that train of oppoſition, jealouſy, and calumny which ſeem to be unavoidably the lot of thoſe who are likely to gain honor and fame by even doing good. Your publication, as a vehicle for whatever temporary matter influences the profeſſion or ſcience of medicine, may probably not prove an improper channel for communicating the Outlines of this Scheme, more eſpecially as (if worth attention) it will apply to the Hoſpitals in other parts of the metropolis, as well as to thoſe in all large towns.

* Doctor Bradley; Mr. Saxon, architect; G. C. Bedford, Eſq. John May, Eſq. and Mr. Robert Southey.

The conſiderations which led to the notion of projecting a plan for eſtabliſhing an Afylum for the Convaleſcents of the great public Hoſpitals in London, were derived from facts which had fallen under my own obſervation. I had often traced the paths of individual paupers, diſcharged from Hoſpitals in a convaleſcent ſtate, (for it may be obſerved that few patients leave an hoſpital in perfect health) and had generally found them ſinking under the accumulated impediments of immediate poverty, loſs of their former occupation, and want of all the means to ſupport and comfort a debilitated frame. From theſe cauſes they either returned to the Hoſpital, or, deſpairing of effectual relief, ſunk under their diſtreſſes, or were thrown upon the pariſh work-houſe. Many ſuch caſes occurred to my own knowledge; and it ſeemed highly probable that the Subſcribers to Hoſpitals for relieving ſick and lame poor, would gladly ſupport any inſtitution for the more effectually completing their benevolent wiſhes. The numerous wants which attend a poor man diſcharged in a ſtate of returning health from a Hoſpital, preſented themſelves as almoſt inſurmountable difficulties; moſt of theſe, however, were in theory overcome. To return to his empty garret badly cloathed, pennyleſs, and uncertain of that employment which his mean ſtate hardly enables him to perform, is a proſpect which cannot be borne with cheerfulneſs; and hence the almoſt univerſal deſire among the poor to remain in a public Hoſpital after they are cured of their bodily complaints. In thoſe caſes where a family depends on the labour of a parent, the ſcene is ſtill more diſtreſſing; and where children are returned half ſick to their parents, they ſeldom meet with the needful means of recovery.

The bad air of the metropolis alone ſeemed a ſufficient objection againſt convaleſcent eſtabliſhments within the town; neither could any ſort of healthy exerciſe be expected from ſimple manufacturing labour to be performed within doors. The idea of a public kitchen and fruit garden, ſituated within a mile or two of London, embraced every deſirable quality; and as a conſiderable profit would accrue from the ſale of the produce of an extenſive garden of this deſcription, it appeared above all others the moſt eligible for our purpoſe. The plan then grew up, and the neceſſary enquiries were made. The number of acres to be cultivated by the number of convaleſcents, with the ſeveral occupations of each deſcription of the lame or infirm, were laid down; the expences of building and encloſing, the plan of which was admirably drawn out by Mr. Saxon; the total expence of maſter and miſtreſs, ſervants, two horſes, market waggon, &c.; rent of land, diet of convaleſcents, were eſtimated to leave a fair recompence in money for each

each convaleſcent when diſcharged from this aſylum. The particulars of this project were given by Mr. May to the Society for bettering the Condition of the Poor, about the time of its firſt origin; and I think it was delivered by myſelf to Count Rumford, who approved of ſeveral parts, propoſed ſome amendments, and queries. Here the buſineſs has reſted; but if any of your Readers wiſh for the whole particulars, drawings, &c. I will gladly deliver them over to him, together with any other information I may poſſeſs on this ſubject.

Soho Square,
March 21, 1801.

I am, your's, &c.
ANTHONY CARLISLE.

Observations on Pulmonary Consumption, and on the Utility of the Climate of Madeira for Phthisical Patients, addressed to a Physician in London. By Jos. Adams, M. D.

My dear Sir,

BEFORE my departure from England I had collected notes on many ſubjects, which I conceived my leiſure in this iſland would have enabled me to arrange. I need not tell you what I have compleated ſince my arrival; if it ſeems little for five year's reſidence, recollect that, healthy as this ſpot is, it has furniſhed me with ſome papers. At all events, you of all others ſhould be the laſt to accuſe me of indolence, ſince no man in the world is leſs diſpoſed than yourſelf to appear unprepared before the public. It is much to be wiſhed that the author to whom you refer me, before he had made up his book on Conſumption, had made cloſer enquiries into what he only ſeems to hint, namely, the varieties of the diſeaſe. Perhaps, when this is accurately accompliſhed, inſtead of wondering that Conſumption is found in moſt parts of the world, we ſhall find even the climate of Great Britain a remedy for ſome ſpecies of that diſeaſe. Not, I will admit, where ulceration has taken place, becauſe a more equal temperature muſt be neceſſary, that the conſtitution may be as little as poſſible interrupted in repairing the miſchief. We have now too many proofs of the reſources of Nature, to doubt her powers in healing ulcerated lungs. This, however, can only be under certain circumſtances; for if ſo important an organ has ſuffered to ſuch a de-

gree as to prevent the neceſſary functions of life, the means of reſtoration are cut off, and the caſe muſt end fatally.

That what is called Phthiſis Pulmonalis is known all over the world cannot be doubted; but the true Engliſh Conſumption is, I believe, peculiar to cold, and chiefly to be dreaded in uncertain climates. It is worth while to mark the etymology of different countries. The Greeks gave the name φθισις, from the idea of corruption. Hippocrates, and his ſucceſſors, found in the lungs of ſome phthiſical ſubjects large collections of matter, which, as ſoon as the ſac had any communication with the air, became putrid. Hence they conſidered the diſeaſe a *corruption* of the lungs, and fancied that putrid matter from the liver and other parts, being transferred to that organ, might produce an incurable diſeaſe. We find Celſus, with his uſual accuracy, making a diſtinction between φθισις and *tabes*, conſidering the former as only one ſpecies of the latter.

But that ſpecies of conſumption from which originated the term phthiſis, is uſually the effect of pleuriſy, and is very different from another with which it is confounded, and which gave riſe to the idea that the expectoration of purulent matter was neceſſarily fatal. This laſt diſeaſe has its origin in the ramifications of the bronchia. It begins with cough and expectoration of mucus. If theſe continue for any time in a young ſubject, there is always an apprehenſion leſt the diſeaſe ſhould be confirmed; that is, leſt by frequent returns of inflammation the ſecretion ſhould become habitual. This danger is very much increaſed if the patient contracts the habit of ſtraining himſelf into a cough, in order to diſcharge a ſmall remaining quantity of mucus which he conceives will continue to irritate as long as it remains in the trachea, but which is in fact only ſecreted by the parts to protect them from the patient's efforts, conſequently in proportion to his diligence is the ſecretion increaſed. I have often been aſtoniſhed how little attention phyſicians have paid in not admoniſhing their patients to ſuppreſs their cough as much as poſſible. In all diſeaſed lungs this ſhould be attended to, but more particularly in the laſt mentioned; for by this conſtant irritation on a ſecreting ſurface, ulceration is at laſt produced, which, when we conſider the ramifications of the bronchia, may ſoon be ſo extenſive as to prove fatal. The only writer I find in my notes who deſcribes this ſpecies of conſumption is Chalmers, in his "Diſeaſes of Carolina;" it however exiſts, I believe, in moſt parts of the world, but principally where the ſeaſons are uncertain, and the inhabitants moſt ſubject to coughs.

A third cauſe of conſumption is not only found in every part of the world, but is much more common than is ſuſpected. This

This is the only one that begins with that ſhort dry cough which many writers have conſidered as the firſt ſymptom of conſumptions in general. This diſeaſe is a chronic inflammation, or frequent habitual, though ſlight, inflammations of the lungs, which by repeated effuſion of coagulable lymph, produces adheſions of the cellular part of the lungs, and thus obliterates their cavity, or prevents their expanſion. The appearance in the dead ſubject is extremely well deſcribed by Dr. Baillie.* Mr. Abernethy, by his frequent examination of the bodies of thoſe who died phthiſical, detected it ſo often as to induce him to conſider it one of the moſt common cauſes of conſumptions.† This is, I believe, the only ſpecies of the diſeaſe known in this iſland, if we except thoſe from hæmorrhage and pleuriſy, both which are very uncommon.

Though all theſe are very diſtinct in their origin and progreſs, yet in the moſt advanced ſtages they have many ſymptoms in common; indeed, excepting the purulent expectoration, which never occurs in the conſolidated ſtate of the lungs from the adheſive inflammation, the cloſing ſymptoms of each are nearly ſimilar.

But you are growing impatient to hear of Madeira. True it is, my dear Sir, we are apt to be *semper ad eventum feſtinantes et in medias res*; and if I were writing only to you, the latter ought to be paſſed over *haud secus ac notas*; but you inſiſt on my writing to the world; if ſo, I muſt diſcriminate what I mean by a diſeaſe before I propoſe a remedy.

Mr. Abernethy, in the paſſage before alluded to, gives many judicious directions, by which the conſumption from conſolidated or infarcted lungs, if you will admit ſo antiquated an expreſſion, may be diſcovered at an early period. Whenever we find the ſhort dry cough with emaciation, it ſhould always be ſuſpected; and his teſt ſeems ſufficient to diſtinguiſh the diſeaſe from all others, excepting the early ſtage of numerous ſmall tubercles. To diſtinguiſh theſe two complaints we ſhould, in the latter, look for other ſigns of ſcrophula; but in the former, there is a peculiarity in the caſt and character of features which is very ſtriking. Inſtead of that ſenſibility which enlivens the ſcrophulous countenance, and that ſanguine diſpoſition which ſees, even in the moſt unfavourable ſymptoms, a proſpect of amendment, we find a ſtiffneſs in all the motions of the features, and of the whole body, which is always in a very erect poſture. The patient frequently anticipates his doom

* Morbid Anatomy, Chapter of the Lungs.

† Surgical and Phyſiological Eſſays, Part I. p. 155.

doom with a languor and complacency, if poſſible, more affecting than the unfounded hopes of the other victim. When we are ſatisfied that this is the diſeaſe, we may, I think, without change of climate, always inſure ſucceſs, at leaſt as long as the appetite for food continues. Exerciſe, by which the blood is more determined to the limbs, and occaſional evacuations to anticipate that plethora which may have become almoſt periodically habitual, will ſeldom fail of ſucceſs in any climate. But your patience muſt be by this time exhauſted; I ſhall, therefore, bring you to Madeira.

In all caſes of tubercular or ſcrophulous conſumption, if, as you expreſs it, the patient does not ſaunter away his time after you have adviſed him to leave England, we can with certainty promiſe a cure.—Where the lungs are ulcerated from other cauſes, it remains for you to determine whether there are powers remaining in the conſtitution to effect a cure, if the patient is placed in the moſt favourable circumſtances; for though we ſee many recover from a ſituation which invariably proves fatal during the winter in England, yet we have alſo inſtances in which an emaciated carcaſe has been ſurrendered to the waves during the voyage, or arrived only early enough to be decently interred. In an earlier period of the diſeaſe there can be no ſituation in the world ſo well calculated for the reſtoration of diſeaſed lungs as the iſland of Madeira.

The valley of Funchall is defended by immenſe hills from every wind but the ſouth, where it is open to the ſea breeze; this preſerves a temperature ſo even, as is unknown in any other part of the world. Our winters may be compared to your ſummers in every thing but the length of days, and thoſe ſudden changes from heat to cold to which you are ſubject. The thermometer with us is often ſteady within doors, or varies ſcarcely a degree for weeks together. During winter, its whole range is from 58 to 65; and in ſummer, from 70 to 75, rarely amounting to 80, the heat being always tempered by a breeze in proportion to the force of the ſun. The dryneſs of our atmoſphere is not leſs remarkable; this is, I believe, of leſs conſequence in conſumptive caſes than in thoſe which are called humoral aſthma, a diſeaſe unknown in this country. For want of good hygrometers, we have hitherto only been able to judge by the abſence of fogs, by the rapidity of our rivers, which have refuſed a nidus to all freſh water fiſh excepting ſuch eels as can ſecure themſelves under large ſtones, and by our ſecurity from muſquitoes and moſt other gnats; frogs, toads, and leeches are equally unknown. Since my arrival, I have not ſeen or heard of a caſe of intermittent fever; and the few dyſenteries produced by the autumn, are milder and more eaſily

relieved

relieved than thoſe in England. However, to decide the queſtion beyond a doubt, I procured two of Mr. Lane's hygrometers: One of theſe was ſuſpended in open Veranda expoſed to the beach, and the other at the reſidence of the Hon. Auguſtus Phipps, leſs than a mile out of town, and in a ſituation generally reputed damp for this country. By Mr. Phipps's regiſter, which you will receive with this, it appears that the finger rarely pointed higher than two, and was moſt commonly lower for more than a month of our rainy ſeaſon. The other hygrometer was ſo perpetually at, or near °, that the gentleman who had the charge of it, grew tired of marking its trifling variations.

This diſcuſſion appears to me of no further conſequence, than as far as truth is concerned, till it is found that a dry air is neceſſary for thoſe who feel a temporary relief from enhaling hydrogen gas, the ſteam of water, and other analogous ſubſtances. The fact is much more to the purpoſe, that in all caſes of ſcrophulous conſumption, not too far advanced, the climate of Madeira proves a certain remedy. The only obvious cauſes I can offer for this *conſtant* ſucceſs are, firſt, the equal temperature of our climate; next, that the lungs are not irritated by any particles ariſing from an open fire, or by the contraction of the ſkin from a partial acceſs of air, which artificial heat will always produce. Our roads too being moſt of them paved, and no wheel carriages uſed in the moſt inhabited part of the iſland, thoſe clouds of duſt never ariſe which dry weather produces in other parts of the world, which in hot climates will ſometimes produce catarrh, and which are always found injurious to weak or diſeaſed lungs. Theſe are, I believe, the principal enquiries you wiſhed to make: It is true, they are of little conſequence compared to the important fact you have in view. It is, however, ſatisfactory to trace probable cauſes; and it may be well worth your while to try whether ſpacious buildings, regularly heated, ſafely ventilated, and large enough to admit of neceſſary exerciſe, may not anſwer the purpoſe for ſuch whoſe want of means, of courage, or of leiſure, prevent their taking a voyage to a more genial climate. I remain,

MY DEAR SIR,

Yours, faithfully,

Madeira, Jan. 21, 1801. J. ADAMS.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

WITH the view of benefitting thoſe unfortunate females who are afflicted with ſuch deformity of the pelvis as precludes the poſſibility of their bearing full-ſized live children, I beg leave to relate one of two ſucceſsful caſes of premature delivery, firſt recommended by Dr. Denman, which I have lately been engaged in.

In the beginning of January, I was conſulted by a woman of the above deſcription, the wife of a reſpectable farmer who lives about ſeven miles from this place. She told me, that ſhe then wanted ſix weeks of her natural time of delivery, and was willing to ſubmit to any operation that would give her the chance of a live child. Finding ſhe had delayed applying to me a fortnight longer than ſhe ought to have done, I immediately ſent for the gentleman who had before attended her; and learnt that her two firſt children were feet preſentations; and the latter, thoſe of the head; that the neceſſary force uſed in extracting the præternatural preſentations deſtroyed life; and that embryotomy, in the three laſt caſes, was performed with the utmoſt difficulty, from diſtortion preventing the head ſinking into the pelvis; I alſo underſtood that he had been twice aſſiſted by Dr. L—w, a man of great and deſerved eminence in his profeſſion; and I have no doubt but the caſes were conducted with great patience and judgment.

I immediately propoſed rupturing the membranes, to which my friend not only cordially aſſented, but offered to attend the parturition. To be concife, I ſhall only obſerve that the os uteri was high up, inclined backward, and cloſely contracted; but by moderate preſſure, and a rotatory motion made with the finger, it was ſoon dilated, ſufficiently for me to introduce a male catheter, ſomewhat ſtraightened. This, however, not anſwering the purpoſe of rupturing the membranes, I introduced another inſtrument, a little more pointed, and diſcharged between three and four pints of water. About twenty hours after, my patient was ſeized with ſtrong labour pains, and with great difficulty delivered of a live child. The child was ſmaller than uſual, and the preſentation footling.

I am, your's, &c.

Calne, Wilts, Mar. 16, 1801. HENRY HEADLY.

Prize

Prize Questions for 1801, *&c.*

THE anniverſary meeting of the Medical Society of London, was held at their houſe in Bolt Court, Fleet Street, on Monday, the 9th of March, when the Officers and Council for the year enſuing were elected; after which the annual Oration was delivered by Mr. Chamberlaine, ſurgeon, who gave a conciſe hiſtory of the Society from its inſtitution, and made ſuitable and well deſerved panegyrics on its founders, particularly on the reſpectable phyſician who has been its greateſt benefactor.

The orator then indulged his talents in beſtowing the well merited praiſe on thoſe members who had diſtinguiſhed themſelves by their improvements in the practice of Medicine and Surgery. He, however, laid it down as a rule not to be deviated from, that the name of no *Fellow* of the Society ought to be mentioned, as all might be ſuppoſed to be *preſent*. This circumſtance led him, when enumerating the *correſponding members* who had eminently contributed to the advancement of medical knowledge, to omit the name of Dr. Jenner who was preſent, and whom Mr. C. believed to be a Fellow. The omiſſion however was amply compenſated for in the courſe of the evening, Mr. C. having been informed of his miſtake. — The annihilator of the Small-pox was drank among the principal benefactors of the human race.

Mr. C. alſo adverted to the act of parliament lately paſſed for taking an account of the population of this country, which he conſidered as likely to produce conſiderable advantage, not only to the Science of Medicine, but alſo to that branch of the mathematics which is employed in calculating the chances of ſurvivorſhip, and the duration of life, derived from the Bills of Mortality; which latter will, no doubt, in future, be placed upon a more regular and certain ſyſtem than is now practiſed. After many judicious obſervations upon the extreme inaccuracy and abſurdity of theſe Bills, which ſatisfactorily evinced the neceſſity of a reform, he adverted to the miſchief produced by the aſtoniſhing increaſe of the ſale of patent and other empiric medicines, and, in order to ſhew how much more the uſe of thoſe injurious compoſitions prevail in South than in North Britain, he obſerved that the net amount of ſtamp duties on thoſe articles paid in the former, in one year, was not far ſhort of £. 14,000, while in the latter it produced ſomething under £. 50, and theſe excluſive of the duty upon advertiſements for the ſame.

The Preſident then declared the adjudications of the Fother-

gillian, or gold medal, and alſo of the ſilver medal annually preſented by the Society; the former of which was delivered to Dr. Bouttatz, a Ruſſian phyſician, for his Eſſay on the Medical Uſes of Phoſphorus; the latter was adjudged to Dr. Joſeph Adams, of Madeira, a correſponding member of the Society, for his paper read before them on the Framboeſia Guinenſis, an intereſting account of a diſeaſe but little underſtood in this country, although common in tropical climates.

The prize ſubjects for the year 1801 were then announced, viz.

1. The cauſe of the heat in fevers.
2. The medicinal effects of arſenic externally and internally applied.
3. The diſtinguiſhing characters of Scrophula in its various ſtages, and in different parts of the body.
4. The cauſes and treatment of deafneſs.
5. One or more diſeaſes, not generally known, peculiar to artificers in any branch of manufactures.

The Gold Medal, value ten guineas, will be given for the beſt anſwer to any one of the above ſubjects, agreeably to the following regulations:

1. Each Diſſertation ſhall be delivered to the Secretary, in the Latin, Engliſh, or French Language, on or before the firſt day of November, 1801.
2. With each Diſſertation ſhall be delivered a ſealed packet with ſome motto or device on the outſide; and within, the Author's name and deſignation; and the ſame motto or device ſhall be put upon the Diſſertation, that the Society may know how to addreſs the ſucceſsful candidate.
3. No paper with the name of the Author affixed can be received; and if the author of any paper ſhall diſcover himſelf to the Council, or to any member thereof, ſuch paper ſhall be excluded from all competition for the medal.
4. All the Diſſertations, the ſucceſsful one excepted, ſhall be returned, if deſired, with the ſealed packets unopened.

The Society continue to offer two ſilver medals annually; one to the author of the beſt Eſſay, read before the Society within the year, by a Fellow, that is, any Member who reſides within ſeven miles of London; the ſecond to the beſt Eſſay by any other perſon.

The following is a List of the Officers and Committees forming the Council.

PRESIDENT.	TREASURER.
Dr. James Sims.	Dr. Walker.

LIBRARIAN.

LIBRARIAN.
1 Mr. J. Hurlock.

SECRETARIES.
1 Mr. Field
2 Mr. J. H. Hooper.

SECRETARY FOR FOREIGN CORRESPONDENCE.
1 Dr. R. Hooper.

COMMITTEES.

I. THEORY and PRACTICE of PHYSIC.
1 Dr. Sir J. M. Hayes, Bart.
2 Dr. Lettſom
3 Dr. Hulme
4 Dr. Saunders
5 Dr. Bradley.

II. ANATOMY and PHYSIOLOGY.
1 Dr. Relph
2 Dr. Fryer
3 Mr. Abernethy
4 Mr. Coleman
5 Mr. Mackartney.

III. SURGERY.
1 Mr. Ford
2 Mr. Norris
3 Mr. Ware
4 Mr. Forſter
5 Mr. Blair.

IV. MIDWIFERY.
1 Dr. John Sims
2 Dr. Haighton
3 Dr. Petch
4 Mr. Webb
5 Mr. Ring.

V. MATERIA MEDICA and PHARMACY.
1 Dr. Yellowly
2 Mr. Jackſon
3 Mr. Kilpatrick
4 Mr. Jeaffreſon
5 Mr. Mackinder.

VI. BOTANY and NATURAL HISTORY.
1 Dr. Bancroft
2 Dr. Thornton
3 Mr. Chamberlaine
4 Mr. Whately
5 Mr. Strong.

VII. NATURAL PHILOSOPHY and CHEMISTRY.
1 Dr. Babington
2 Dr. Elliot
3 Dr. Garnett
4 Mr. Parkinſon
5 Mr. Seaton

REGISTER.
Mr. Wheeler.

ANNIVERSARY ORATION FOR NEXT YEAR, Dr. Lowdell.

Extracts from a Letter received from Dr. MARSHALL *by a Friend in London.*

DEAR FRIEND,

SINCE our laſt we have been exceedingly occupied in attending to the object of our miſſion, and our preſence here has been exceedingly à propos, the Small-pox having been at Minorca, on board the fleet, and at Malta: The day after our arrival at this place, we inoculated ſeveral children in the

Foundling Hospital, and from them others. In order to obtain the perfect confidence of the inhabitants, we determined to subject some of these children to the test of the Small-pox; this was done in the presence of the Governor, the Tunissian Ambassador, the British Consul, many of the clergy, and the medical men of the island. Our success in this test, as you may suppose, was complete; and now the Governor, &c. give to it the most perfect confidence, with regard to its efficacy in stopping the ravages of the Small-pox.

The Governor has had Dr. Jenner's work translated, and printed for the use of the inhabitants; and he has also established an hospital for the inoculation of the poor, under the title of the JENNERIAN INSTITUTION: Thus the true name is at last given to this discovery, which it ought at first to have received, and which I hope now it will never lose.

The Governor of the island, General Ball, is the idol of the Maltese; he is establishing a botanic garden, interests himself in their hospitals and public regulations, and among other conciliating measures, boasts of the service England renders them by the introduction of the Cow-pox, and delights them by the offer of having the whole island inoculated. As the Small-pox is now amongst them, they have pressed in crouds, both the nobility and the mass of the people. At the commencement of our inoculation, in going to the hospital we formed a small procession; the Governor in his laced hat, the clergy in their canonicals, your friends Marshall and Walker, and the medical men bringing up the train. The Governor has given us for our residence the most beautiful palace (heretofore the Grand Master's) of Valetta to reside in. The season here is most delightful; it is now like May with you; green peas are just coming in, cauliflowers, &c. are in perfection.

Amongst the fleet and army also our endeavours have been very successful. The Small-pox was ravaging, and had been very fatal; but it now seems to be extinct. Lord Keith and Sir R. Abercrombie have shewed us every kindness; his Lordship particularly recommended the Jennerian Inoculation to the fleet, as you will see by an extract from the Admiral's memorandum, in consequence of the Small-pox raging in the Alexander and other vessels.

Foudroyant, Malta, Dec. 9, 1800.

"The commander in chief thinks it necessary to recommend to the respective captains, an immediate application to Dr. Marshall and Dr. Walker, whose safe and excellent mode of treatment has been experienced on board the Foudroyant and other ships, in preventing the dreadful effects so often attending the Small-

Small-pox, which may now so easily be avoided without danger or inconvenience.

" By command of the Vice Admiral,
" W. YOUNG."

It being impossible, on account of the short stay of the fleet here, to complete the inoculation, it was necessary that one of us should accompany it; and the enterprising spirit of Doctor Walker could not rest till it was determined that he should go. Since he went I have inoculated the whole of the troops left here under the command of General Pigot. I have had to combat the prejudices of the people, to convince them of its efficacy; and can say, that I have at last conquered. By a frigate which came in here last night, I learn that the fleet and the army were on the 13th instant in the Bay of Marmorisse, in Asiatic Turkey; and that Dr. W. is very busy in attending to his patients. The Dey of Algiers is very anxious to have our inoculation introduced amongst them; so that there scarcely appears to be a prospect of the termination of our labours. We have been made happy by meeting here several of our acquaintance on the medical staff; and beg you to present our best respects to our friends in London. I am, &c.

Valetta, Jan. 21, 1801. J. H. MARSHALL.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

BEING a constant reader of your valuable Journal, and a well wisher to every attempt at improvement in Medical Science, I observed with pleasure the account given in one of your late numbers, of " Diseases in the Liverpool Dispensary." As you solicit similar communications, I am induced to send you the following Account of Cases that have occurred at the Bristol Dispensary; if you think it worth insertion, it is much at your service.

Cases occuring at the Bristol Dispensary, from January 1, *to December* 31, 1800.

Asthma	18	Consumption	64
Typhus Fever	176	Scrophula and Scorbutic	16
Dysenteria and Diarrhœa	114	Fluor Albus	5
Puerperal Fever	23	Sarcocele	1
Menstrual Complaints	6	Peripneumonia	42
Small-pox	12	Opthalmia	6

Continued

Continued Fever	183	Bilious Complaints	17
Inflammation and Contusion	8	Stone and Gravel	6
Dropsy	33	Asthenia	3
Hæmoptæ	9	Cough	4
Podagra	5	Measles	10
Erysipelas	8	Prolapsus Uteri	1
Uterine Hæmorrhage	14	Retrovertio Uteri	1
Stomach Complaints	53	Laceration of the Perineum	1
Paralysis	10	Fright	2
Pleuretic	18	Jaundice	1
Hæmorrhoidals	2	Suppression of Urine	2
Convulsions	3	Epilepsy	2
Impotence	1	Painter's Colic	1
Complaints of the Head	3	Intermittent Fever	3
Hectic Fever	11	Putrid Fever	8
Nervous Complaints	10	Quinsy	3
Acute Rheumatism	10	Spasmodic Affections	4
Diabetes	3	Cholera Morbus	1
Worms	2	Diseased Kidney	1
Abortion	8	Rickets	2
Chronic Rheumatism	9	Milk Fever	2

It may be necessary to observe, that the *Bristol Dispensary* was originally established for the benevolent purpose of attending such of the poor of the city, *at their own houses*, as from various circumstances are precluded from becoming *in* or *out* patients of the Bristol Infirmary, (to which therefore the charity is justly considered as an auxiliary,) but from this cause the numbers who receive benefit from it are considerably less than at other charitable institutions under the same *name*. I am, &c.

W. D. ROLFE,
Apothecary and Man-midwife to the Bristol Dispensary.

March 15, 1801.

N. B. I intended sending the state of this year's patients monthly, and also a statement of some cases of Dropsy, &c. treated with Digitalis, which I have been prevented doing by sickness of myself and family, but will now give two months state of the patients; and endeavour, for the future, to send it monthly, with the state of cases above mentioned.

State of the Patients in the Bristol Dispensary, from the 1st of January to the 1st of March, 1801.

Typhus Fever	87	Uterine Hæmorrhage	4
Dropsy	14	Rheumatism	10
Mania	1	Spasmodic Affections	3
Pathisis Pulmonalis	3	Scrophula and Scorbutic	7
Bowel Complaint	16	Simple Fever	16
Consumption	10	Peripneumonia	28
Cough and Dyspnœa	9	Asthenia	3

Leucorrhœa

Leucorrhœa	4	Puerperal Fever	4
Podagra	1	Small-pox	4
Opthalmia	2	Palsy	4
Nervous Complaints	6	Bilious	1
Cynanche Tonsillarum	1	Hernia	2
Stomach Complaints	15	Abortion	1
Asthma	7	Menstrual Obstruction	3
Convulsions	4	Erysipelas	1
Pleuretic	1	Hæmoptæ	1
Hæmorrhoidals	1		

Account of Diseases in an Eastern District of London, from the 20th of February to the 20th of March, 1801.

	No. of Cases.		No. of Cases.
ACUTE DISEASES.		Hysteria	3
Typhus	20	Apoplexia	1
Varicella	1	Fluor Albus	7
Pneumonia	6	Amenorrhœa	6
Cynanche Tonsillaris	1	Menorrhagia	2
Intestinal Hæmorrhagy	1	Prolapsus Vaginæ	1
CHRONIC DISEASES.		Sciatica	2
Cough	25	Rheumatismus	20
Dyspnœa	14	PUERPERAL DISEASES.	
Cough and Dyspnœa	17	Ephemera	4
Pleurodyne	4	Menorrhagia Lochialis	3
Phthisis Pulmonalis	5	Lochiorum Suppressio	1
Hydrothorax	3	Mania	1
Ascites	2	Rhagas Papillæ	4
Anasarca	2	INFANTILE DISEASES.	
Hepatitis Chronica	1	Ophthalmia	3
Diarrhœa	12	Ophthalmia Purulenta	2
Cephalæa	4	Aphthæ	3

We had occasion to remark in our last Report, that the change which had taken place in the temperature of the atmosphere, would probably increase the number, and aggravate the symptoms of those diseases which generally prevail at this season of the year. What it was but natural to expect, has actually taken place. Those persons, who from the mildness of the season entertained the hope of passing through the winter without a recurrence of those disorders to which they had heretofore been liable, were reminded of their constitutional infirmity upon the approach of the frost.

Catarrhal affections, Peripneumonies, Phthisis Pulmonalis, and other morbid affections of the organs of respiration have increased in their number, or have been attended with an aggravation of symptoms.

symptoms. The frost, however, which was sufficient to introduce this class of diseases, was too short in its continuance to produce a favourable change in the state of another class. A fever, which has long been considered as the prevailing epidemic, still prevails, and those alarming affections of the head, which we have had such frequent occasion to remark, still continue to form a distinguishing characteristic of the disease.

Varicella or Chicken Pox, a single case of which appears in our list, is a disease of so mild a nature as not often to require much medical attention. It is generally introduced by a slight degree of fever, attended with trifling pain in the head or back, sometimes with slight cough and a general lassitude. About the third day an eruption appears on some part of the body, which in its progress assumes rather the appearance of vesicles than pustules, which arrive very soon at the state of maturation, and disappear more hastily than the small-pox. In the instance referred to in the list, this disease, which occurred to a child of nine years old, assumed a more unpleasant appearance. A considerable degree of fever preceded the eruption, and this was of such a nature as not to be easily distinguished at first from the Small-pox. The number of pustules, together with their size and appearance, might, for a time, have led to a doubt respecting the nature of the disease; there was sufficient evidence, however, of this patient having been before infected by the Small-pox.

From such pustules, very probably, matter has been sometimes taken, with a view to inoculate the Small-pox; and the patient, some time after receiving this slighter disease, has been affected by the Small-pox, and an opinion has been entertained that, in this instance, the infection has been received a second time.

Diseases admitted under the Care of the Physicians of the Westminster Hospital, from Dec. 24, to March 25, 1801.

Continued Fevers	50	Diarrhœa	10	Jaundice	1
Intermittents	1	Dyspepsia	3	Lithiasis	3
Pleurisy	4	Dyspnœa	2	Obstipatio	3
Small-pox	1	Enterodynia	2	Paralysis	2
Amenorrhœa	10	Gastrodynia	3	Phthisis	2
Anasarca	7	Hæmatemesis	1	Syncope & Palpitation	2
Ascites	4	Hæmaturia	1	Pleurodyne	1
Asthenia	6	Hæmoptysis	1	Podagra	1
Asthma	2	Hæmorrhois	1	Rheumatism	19
Catarrh	12	Hydrothorax	1	Struma	13
Cephalæa	6	Hydrops ovarii	1	Tabes	2
Chlorosis	3	Hysteria	4	Tinea	1
Chorea	1	Impetigo	9	Worms	1
Colic	4	Ischuria	1		
Cough	22	Itch	3		

The greatest part of the fevers were of the typhoid kind, as usual at this season of the year; but there were many of them that more resembled the autumnal bilious fevers, and in all of them there was an unusual tendency to delirium. T. B.

Mr. BRADLEY's *Cases in Surgery, &c.*

[Continued from our laſt, pp. 219—223.]

Case of Trismus, or Locked-Jaw.

LYDIA KAYE, aged 20 years, of a full habit and ſanguine conſtitution, and fifteen weeks advanced in her pregnancy, had the misfortune to receive a blow from the head of a floor-bruſh, on the back part of her head, at its articulation, which knocked her down. She was taken up ſenſeleſs, and laid on a bed. Three hours afterwards, I found her in the ſame poſition in which ſhe was laid. Her head was thrown backwards, and inclined rather to the right ſide. The part on which the blow was inflicted, was ſomewhat full and painful, but without any diſcolouration or muſcular rigidity. Her pulſe was quick and fluttering, and her reſpiration panting, and very frequent. Her jaw was locked ſo cloſe, as to render it very difficult to paſs the handle of a table ſpoon flat-wiſe betwixt her teeth. On pouring a little water from a tea ſpoon into her mouth, ſhe ſeemed to make one effort to ſwallow; but, on repeating it ſeveral times, no further attempt at ſwallowing was made, and the water regurgitated, without exciting any apparent action of the ſtomach or lungs. The eye-lids were about two-fifths open, and were looſe, and afforded no reſiſtance on opening them: The upper, when elevated, might be about ten or twelve ſeconds in receding to their former poſition. The eye-balls were drawn upwards, and fixed, inſomuch, that little more than the verge of the cornea was diſcernible; the pupil alſo was very much dilated, and exhibited not the leaſt contraction on being expoſed to the light. She was hot, and perſpired freely, eſpecially on the cheſt. No further injury ſeemed to have been done to any other part of the body, except a ſlight contuſion on the left temple, extending downwards to the articulation of the lower jaw. This part, on preſſure, always afforded her pain, and which was known by her moaning and moving her right arm, although theſe two ſymptoms ſometimes exiſted independently of this cauſe. The maſſeter-muſcles were full, and contracted, eſpecially the left.

On attributing theſe ſymptoms in ſome meaſure to *hyſteria*, a ſolution of *emetic tartar* was ordered to be taken at intervals; and notwithſtanding her inability to ſwallow, a quantity was taken in the courſe of the night, ſufficient to puke her twice,

but without affording her any kind of relief: A blistering-plaster was also laid betwixt her shoulders.

On the following day, (Sept. 14th), her symptoms were very little mitigated. Her head was in the same position, and the back and injured part of the neck was painful, though not much swelled. She was restless, especially with her hand, and would only lie on her right side; for, by this time, she could turn herself in bed. Her jaw was equally as much locked, yet her pulse was fuller, and more distinct, though yet quick, and her breathing had become more natural. She had had no stool, but had made water once, and previous to which, had given some indication of her wants. The plaster had wrought well, and she was of a natural heat, unattended with any perspiration. Her eyes were in the same state, both with regard to the eye-ids, eye-balls, and immobility of the iris; and she had not yet attempted to speak. Ordered twelve drops of *tinct. opii* to be taken every hour, in a table spoonful of the following mixture:

℞. Tinct. Valer. ʒiij. Tinct. Castor ʒj. Aq. fontan ℥vij. M.

But previous to her taking this medicine, an emollient glyster was ordered; but, through the obstinacy of her friends, was not administered; and, contrary to my advice, lost nine ounces of blood, which seemed to sink the pulse, without producing any effect on the jaw. To-day, however, she gave the first indication of being sensible; for, during the operation of bleeding, she kept her arm quite steady, whereas before, it was almost in a state of continued motion. She only took six times of her medicine to-day, all of which made her ill, and gave her pain at her stomach, of which she had no relief, till she threw up. The third, fifth, and sixth doses were, however, only rejected.

The neck and left side of the face were ordered to be rubbed with the following liniment, three or four times a day.

℞. Liniment. Ammon. ℥jss. Tinct. Opii. ʒij. M.

She found great relief from this application, and signified a wish for a more frequent use of it.

15th. Her pulse was fuller, and not so quick, and during the night, she had frequent intervals of repose; though scarcely yet any alteration with regard to the jaw. She appeared, however, to be more sensible, and frequently laid her hand on her forehead, and the back part of the neck.

The small degree of tension occasioned by the blow, was reduced, and the muscles of the neck were more lax, though hitherto they exhibited no appearance of strong contraction. With respect to the eyes, there was little variation; but she had nearly the power of sustaining her head, which hitherto had been guided by the force of gravitation, and could bring it more

more forwards, but not quite vertically. She was cool; had perſpired none; took a little tea and chicken broth, and ſipped them through her teeth; had alſo made water once in the night, but yet had no ſtool. Ordered eight drops of tinct. opii to be given in a table ſpoonful of cold water every hour. This medicine ſhe could only be perſuaded to take once, as it again diſagreed with her, but it was not rejected.

16th. She this day could diſtinguiſh colours, and even objects, notwithſtanding her eyes were apparently in the ſame ſtate. She ſlept moderately in the night, and made water plentifully; but even yet had no ſtool. Her pulſe was becoming natural, and her appetite improving daily, but the jaw gave way very little. The muſk mixture was ordered, but ſhe refuſed taking it.

17th. Much the ſame as yeſterday, touching the ſtate of her jaw. Had ſlept moderately in the night, and had made water twice, and towards morning had a motion, by the aid of a ſuppoſitory, compoſed of boiled treacle, with the addition of a little ſalt and butter. Her pulſe was good, (at about 86), and ſhe continued taking her liquid nouriſhment, but yet no ſolids, and ſigned for every thing ſhe wanted; for yet ſhe had not attempted to ſpeak. She ſat up an hour to-day, but with difficulty; could either bring her head forwards, or keep it ſteady; and ſhe alſo walked three yards acroſs the room. Ordered two-thirds of a grain of purified opium to be taken every three hours.

18th. She reſted during the latter part of the night very well, and took five doſes of her medicine, two of which ſhe rejected almoſt immediately, and the reſt ſtayed only whilſt any liquid was taken into the ſtomach: When not thrown up, the opium never failed, as uſual, to make her extremely ill, which ſhe always ſignified by laying her hand on her ſtomach. Her pulſe was approaching more and more to the natural ſtandard. She had a looſe ſtool to-day of a chocolate colour, and very offenſive, and made water freely as uſual. The jaw, though yet very ſtiff, was ſomewhat more free than yeſterday. She can now hold her head vertically, but not long together, as it gives her great uneaſineſs. As to her eyes, there is no apparent alteration.

19th. No muſcular contraction of the face, neck, or any other part appeared to exiſt; yet, notwithſtanding, her jaw was conſiderably locked, but not ſo firmly but a moderate force would ſeparate it one-tenth of an inch. In other reſpects, there was ſome variation, for ſhe could now mutter ſome words, though very indiſtinctly. She made water twice to-day,

but had no ſtool, and the ſtate of her eyes were much as uſual. Ordered a tea-ſpoonful of æther to be taken four times a day.

20th. Her jaw was ſomewhat freer, as ſhe could open it about one-ſeventh of an inch with her own hands. Her pulſe was become natural, and her ſpirits good, and ſhe walked more about the room. She ate minced meats now with a tolerably good appetite, and articulated ſomewhat better, but was yet difficult to be underſtood. She had one motion to-day, and made water twice, and ſaid her medicine did her much ſervice, and was anxious to continue it. She had alſo ſome little return of motion in the eye-balls, and they appeared leſs diſtorted.

21ſt. She articulated rather better, though yet very imperfectly; but her ſpaſm was daily giving way. She was cheerful and lively, and had regained ſome uſe in the eye-lids and eye-balls. On cloſing the eyes, the pupil became ſo far depreſſed, that the axis of viſion appeared parallel with the horizon; but on opening them, the pupil inſtantly receded upwards. Some motion alſo was reſtored to the iris, but too great a degree of light ſeemed offenſive to her, although ſhe imprudently was amuſing herſelf to-day with ſome needle-work, but on repreſenting its impropriety, it was diſcontinued. She complained ſometimes of a little pain and ſtiffneſs on the left ſide of the jaw, at its articulation, but the bruiſed parts exhibited no further marks of injury. She was without ſtool to-day, but made water plentifully as uſual.

22d. Her jaw and ſpeech were much the ſame as yeſterday; but in other reſpects ſeemed rather worſe, occaſioned probably by omitting her medicine. Her appetite was very indifferent, and her ſpirits were dull and flat. She was ſtill without ſtool, and refuſed all the means of procuring any. Ordered a grain of opium every three hours, in ſubſtance, along with a tea-ſpoonful of the æther, in a table ſpoonful of cold water, although it was with great difficulty ſhe could be prevailed on to take the former medicine again.

23d. Slept well in the night, and had taken her medicine ſix times, with good effects; not only in looſening the jaw, but in agreeing with the ſtomach. Her ſpirits were unuſually good, and the appearance of her eyes more natural. She had alſo one motion, and made water as uſual, but her appetite was ſtill indifferent.

24th. Diſcontinued the opium yeſterday, as ſhe refuſed taking it any longer, but the *æther* was perſiſted in as before. The jaw continued giving way, and ſhe could open it ſo far, without aſſiſtance, as to introduce her fore finger into her mouth. She ſpoke alſo more intelligibly; I myſelf could comprehend

ſeveral

ſeveral words, ſuch as *milk*, *meat*, *no*, *&c.* and had now regained a tolerable uſe of her eyes and eye-lids, and could look in all directions; although yet, there ſeemed a ſtrong tendency to look upwards, eſpecially if ſhe fixed her eyes ſtedfaſtly for a moment, either in a horizontal or oblique direction downwards. The iris had now regained its uſual power of contraction and dilatation. She had a natural ſtool to-day, and made water well, but her appetite was yet indifferent. She gradually, however, recovered her ſpeech and general health; but the jaw continued to give way very ſlowly, notwithſtanding the uſe of æther a week longer; and even after the ſpaſm was apparently removed, ſhe complained of a ſtiffneſs a month or five weeks afterwards.

The urine throughout this diſorder was plentiful, and natural in colour, and voided without pain or difficulty, a circumſtance not frequent in *tetanus*. There was a ſtrong tendency to coſtiveneſs, and to obviate which, moſt of the neceſſary means were denied; although, it muſt be confeſſed, that ſhe experienced little or no inconvenience from it. The pulſe, ſoon after the accident, was 136, but daily became ſlower, and more diſtinct, inſomuch, that on the fifth day of her illneſs, they were at or below 90. The blood that was drawn was rather of a looſe texture, conſidering the age and habit of the patient; and bleeding, under ſimilar circumſtances, I am perſuaded, will be inadviſeable.

As the locked-jaw is generally conſidered as a ſymptom of *tetanus*, and no other ſign of this affection being here preſent, we may fairly refer the above caſe to ſome other ſpecies of ſpaſmodic affections. Here was no pain at the *ſcrobiculus cordis*, in the thorax, or abdomen, nor pain or difficulty in ſwallowing; and as to the *opisthotonos*, it may be conſidered as rather proceeding from pain in the injured part of the neck, than from any muſcular contraction.

How far the circumſtance of pregnancy, eſpecially as being nearly the time of quickening, might have in conjunction with the accident, a power in occaſioning the complaint; or whether the latter, independent of the former, was capable of producing it, are perhaps both equally doubtful and uncertain. One circumſtance, which goes particularly towards characterizing this complaint a different ſpecies of *trismus*, is, the very remedy, no leſs than a ſpecific againſt tetanus in general, not only diſordering the ſtomach, but bringing on a pain at the *ſcrobiculus cordis*, which may be conſidered as the pathognomonic ſign of that affection.

Whence we may conclude, that the locked jaw is not neceſſarily connected with, or dependent on *tetanus*; and that *opium* is

is not always a ſpecific in this complaint, for although here, when it ſtayed ſome time upon the ſtomach, its antiſpaſmodic virtues were diſcernible; yet from its unfriendly effects on that organ, a too frequent repetition of it would have been highly unwarrantable. So far from the opium being in this caſe a ſpecific, that it ſeemed to act only in a ſubordinate degree, requiring not only the æther to keep it on the ſtomach, but to prepare that organ for its reception; and even when it was retained ſome time before it was rejected, its antiſpaſmodic effects were not what might have been expected. One particular phenomenon manifeſted itſelf with regard to the eye; for, notwithſtanding the diſtortion of the eye-ball, and the preternatural dilatation and immobility of the *iris*, the patient could diſcern not only colours but even minute objects. The day after bleeding, ſome vivid colour (I believe blue) was accidentally expoſed to her ſight; and her friends were ſenſible of her ſeeing it. This circumſtance gave riſe to a few experiments, the reſult of which proved, that ſhe could ſee or diſcern objects when placed at a certain diſtance. For inſtance, a pen-knife was placed at two inches diſtance, and ſhe ſignified what it was. A half-penny and a pin were alſo placed at certain diſtances, the latter at about one inch, which ſeemed to be the proper *focus*. Theſe ſhe alſo diſcovered; but the pen-knife ſhe could not ſee at ſix inches diſtance. When theſe experiments were made, the eyes were exactly in the ſame ſituation as deſcribed in the narrative; namely, about two-fifths cloſed, and exhibiting little more than the diſk of the cornea, if it may be ſo called, through the eye-laſſes: At this time, on opening the eye-lids, ſo as to expoſe the cornea to the effects of the light, there appeared a ſlight oſcilation of the eye-ball upwards; but on cloſing the eye-lids, it reſumed its former ſituation.

This ſtate of the eyes, with the nature of viſion, tend much to favour the theory of *Dr. Hosack* of *New York*, who maintains, that the *recti* muſcles of the eye contribute much in lengthening or ſhortening the axis of viſion, by enlarging or diminiſhing the refracting medium; and that in proportion as the axis becomes elongated, the eye is rendered leſs capable of ſeeing objects at a diſtance, as was the caſe here.

Mr. Young, in the *Philoſophical Tranſactions*, ſuppoſes the ſole uſe of the retina and optic nerve is, to convey ſenſation to the brain; and this caſe perhaps alſo favours his conjecture, ſince the patient could ſee very well, when the object was applied at a proper diſtance from the eye, notwithſtanding the iris exhibited no ſenſibility when expoſed to the light.*

For

* Her eyes would have been expoſed to a ſtrong candle-light, had not the obſtinacy of her friends prevented me.

For if the ſenſitive power of the iris depends on any connection with the *retina*, why ſhould the function of the former be ſuſpended, whilſt the office of the latter remained unimpaired? There ſeems little doubt of the nerves which ſupply the muſcles and coats of the eye being affected; and equally the ſame certainty of the retina being unaffected; and conſequently in this diſtorted and preternatural ſtate of the parts, no apparent connection may be thought to exiſt betwixt the one and the other; yet this inference is far from being concluſive, when applied to the natural ſtate of the eye, as the phenomena produced by the deranged ſtate of that organ ſeem incompetent to ſolve any of the difficulties relating to viſion in general. The circumſtance of the retina retaining its function whilſt the power of the iris was apparently deſtroyed, may probably, on a due conſideration of the caſe, be accounted for, more eſpecially if we take into the account the alteration effected both in the appendages, form, and contents of the eye. Here we ſuppoſe the *elevator* muſcle to be ſtrongly contracted, which would draw up the eye-ball along with it, thereby making only a ſmall preſſure on its contents; whereas, the counteracting force of the *depreſſor* would preſs ſo powerfully on the under part of this organ, as neceſſarily to puſh up its contents, deſtroy its globoſity, and conſequently to diminiſh its cavity. Hence the cryſtalline humour is puſhed forward through the anterior chamber, which would not only enlarge the pupil, but prevent its contraction. That the pupil becomes enlarged in proportion as the axis of viſion is elongated, it ſeems evident from a *ſpeculum* preſſing ſtrongly on the globe of the eye, and which increaſes the dilatation thereof in a correſponding degree; and beſides, during this enlargement of the pupil, whilſt this inſtrument is applied, little or no motion is diſcernible in the iris, when the eye is expoſed to alternate light and darkneſs. From the ſame reaſons alſo that the pupil is enlarged as the axis of viſion is lengthened, the former becomes leſſened as the latter is ſhortened. This is particularly exemplified in youth and old age.

In the month of July following, I again ſaw this young woman, who complained of weakneſs and watering of her eyes, eſpecially on looking downwards, and could not bear to look ſtedfaſtly at any object. She complained alſo of pain in the head, which it appeared ſhe had been ſubject to, eſpecially in the ſummer ſeaſon, and which ſhe deſcribed as now ſhooting from the fore to the back part of the head, and downwards to the original ſeat of the injury. She ſtill was poſitive ſhe could diſtinguiſh any object, or colour, after ſhe became ſenſible, if held at a proper diſtance from her eyes. She made water as

before

before related, the night after the accident, and ſigned for the neceſſary aſſiſtance, as ſhe always did afterwards. Notwithſtanding this circumſtance, ſhe never recollected any thing from the time of the accident (being Thurſday), till the Sunday following; the clock ſtriking one, being the firſt thing ſhe could remember. She was confident the *opium* always made her ill, and cauſed pain at her ſtomach, eſpecially when taken without the æther, which was relieved only by vomiting; and when taken in conjunction with this medicine, its unpleaſant effects were nearly obviated; when the æther was, however, taken by itſelf, ſhe ſaid it did her more ſervice; and, according to her own expreſſion, always revived her. The eyes appeared diminiſhed in ſize, and the iris to contract very powerfully. The pupil alſo of the right eye, when in a ſtate of contraction, aſſumed an oval form.

In juſtice to Mr. Pearſon, (by whoſe hand we were favoured with Mr. Bradley's Caſes in Surgery) it may be proper to ſay, that the teaching of the medical practice requiſite in Surgery has been his principal object during a ſeries of eighteen years, as the text book of his Lectures evinces. He is, we believe, the firſt perſon in this kingdom who undertook to reduce the principles of Surgery into a ſcientific form, and to explain at great length, all the moſt important chirurgical diſeaſes, and the mode of treating them. Each of his Courſes contains a much greater number of Lectures on Surgery, (although he includes all the operations) than any Courſe ever delivered in London. EDIT.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

YOUR exertions in aid of MEDICAL Science, and, conſequently, in ſubſervience of the intereſts of ſuffering humanity, juſtly entitle you to the warmeſt thanks of the profeſſion, as well as to thoſe of the community at large.

At the commencement of your Journal, I was induced to believe it would eventually prove a highly uſeful and valuable medium of *medical* communication: the regular gradation of *intereſt* and *improvement* in the ſubſequent Numbers, hath amply juſtified the idea; and the plan you have adopted, renders it, in my opinion, more happily calculated for the diffuſion of *profeſſional* information, than any periodical publication which I am acquainted with in our language.

Under this conviction, and anxious to contribute my mite to the common fund, I have taken the liberty of tranſmitting you

you a few FACTS, illuſtrative of the *hiſtory*, *nature*, and *medicinal properties* (chiefly) of certain *articles* and *preparations* of the *Materia Medica* and *Pharmacopœias*; which, from having long been conſidered as *dangerous* by ſome, and *inert* by others, had *nearly*, if not *wholly*, fallen into diſuſe.

What I have to ſtate of a *practical* nature, is the fair reſult of extenſive trial (for the moſt part) in the courſe of *my own* experience. For the ſake of method, I have arranged the ſeveral ſubjects in the *form* of *numerical*, and under the title of MEDICAL ESSAYS. Should the *facts* they contain be of the ſmalleſt *utility* to, and eſpecially were they to prove the *means* of exciting the *experimental researches* of other practitioners, it would afford me the moſt grateful ſatisfaction, from the conſideration that a well-directed enquiry into the *medicinal powers* of thoſe potent but imperfectly known phyſical treaſures, with which the ample kingdom of Nature is ſo abundantly ſtored, muſt neceſſarily be productive of the moſt *eſſential* and *permanent* advantage to MANKIND. I am, &c.

EDWARD OXLEY,

Member of the Royal College of Surgeons of London, and Surgeon to the "Poor and Strangers Friend Society," at Hull.

Hull, November 30, 1800.

MEDICAL ESSAYS.

No. I.

On the Hiſtory, Nature, and Medicinal Properties of the ANTHEMIS PYRETHRUM,

Spaniſh Camomile, or Pellitory of Spain.

SYNONYMA. Pyrethrum. *Pharm. Lond. et Edinb.* Pyrethrum flore bellidis, *Bauh. pix. p.* 14, 8. Pyrethrum officinarum. *Lob.* 447. *Gerarde Emac. p.* 758. *Park. Theat. p.* 858. *Raii. Hiſt. p.* 353. Chamœmelum ſpecioſo flore radice longa ſervida. *Shaw Afric. p.* 138. Anthemis caulibus ſimplicibus unifloris decumbentibus. *Miller, fig. t.* 38. Πυρεθρον. *Dioscorides, lib.* 3, *c.* 85.

Claſs. Syngeneſia. *Ord.* Polygamia ſuperflua, *Linn. Gen. Plant.* 970.

Eſs. Gen. Ch. Recept. paleaceum. *Pappus* nullus. *Cal.* hæmiſphæricus ſubæqualis. *Flosculi* radii plures quam 5.

Sp. Ch. A. caulibus ſimplicibus unifloris decumbentibus, foliis pinnato-multifidis. Vide *Woodville Med. Bot. vol.* 2. *p.* 286.

HISTORY, &c. The ROOT is perennial, of the size of a man's finger, and of the colour of horse radish, long, tapering, and sendeth off numerous small fibres. STEMS, usually simple, round, trailing, scarcely a foot in height, and bearing one flower; LEAVES, pinnate; SEGMENTS, narrow, nearly linear, and of a pale green colour; FLOWER, large at the disc, of a yellow colour; at the radius, white on the upper, and of a purple colour on the under side: The different FLORETS answer to the description given of the ANTHEMIS *nobilis*. It flowereth in June and July.

The ANTHEMIS *pyrethrum* is a native of the Levant, and the warmer latitudes of Europe, but easily bears the winters of this climate; flowering from December until May, but doth not ripen its seeds here, unless the season proves very warm and dry. It was first cultivated in England by LOBEL, in 1570, and afterwards by Mr. MILLER, in 1732: That obtained from abroad, however, is much the best for *medicinal purposes*; the only part employed for which, is the dried root; this comes to us in pieces of three or four inches in length, and from the size of a man's finger down to that of a common quill; (the smaller, as containing the greater quantity of resinous matter, should be preferred) when good, it is externally of a light brown colour, and hath a rough unequal surface; internally is of a whitish hue, and striated texture; hath scarcely any perceptible smell, but if chewed in the mouth, discovereth a pungency of a very peculiar and powerful kind, exciting a copious flow of saliva; this stimulating quality is found to reside in a fixed resinous matter, of a deep red colour, which is lodged in numerous capillary receptacles, situate in the exterior, or cortical portion of the root. Rectified spirit extracteth the *whole* of its warmth; water very little; and no part of it is carried off in distillation or evaporation by either of these menstrua.

MEDICINAL PROPERTIES. It is an act of justice due to the memories of the antients, to observe of this truly valuable article, that, although neglected and almost unknown in *modern* practice, it hath been celebrated for its virtues from the dawnings of medical science, and the far distant ages of antiquity. DIOSCORIDES, the earliest author who wrote professedly on the *Materia Medica*, and who is supposed to have lived not less than 1700 years ago, saith, "*it taketh away the cold shivering of agues, and is efficacious in the dead palsy.*" GERARDE, who wrote 200 years ago, speaks of it as a powerful remedy in *chronic head-achs, vertigo, apoplexy, palsy, epilepsy, muscular debility, and pains of the teeth, &c.* From the time of GERARDE to that of CULLEN, the English authors of

of repute whom I have had an opportunity of consulting, make but very slight mention of the PYRETHRUM, and are, for the most part, *negative* as to its virtues, confining its use merely to that of a *masticatory*. *Dr. Woodville*, however, in his elegant and interesting work, the MEDICAL BOTANY, observes, with the greatest propriety, that, "from the aromatic and stimulating qualities of the PYRETHRUM, there can be no doubt that it might be found an efficacious remedy, and equally fitted as an *internal* medicine, as many others of this class now constantly prescribed." On this ground, of its *sensible qualities* alone, and several years ago, my first experiments were made; the favourable result of most of which, together with the success of various subsequent trials, afford, in my opinion, the most decided confirmation of Dr. WOODVILLE's remark, as well as ample proof that DIOSCORIDES and GERADE, if fanciful in many instances, in this, at least, spake the language of truth and experience.

It is peculiarly unfortunate for my present purpose, however, that owing to my not having ever entertained even the most distant idea of publishing, previous to the appearance of the MEDICAL JOURNAL, I committed such *relative facts* as occurred in the course of my experiments with the pyrethrum, chiefly to *memory*; in consequence of which, many important circumstances have, through the lapse of time, and other concurrent causes, escaped my recollection. The following (which, I trust, will suffice to induce other practitioners to pursue the experimental enquiry) are amongst the leading particulars which strike my remembrance.

CASES.

PARALYSIS *Rheumatica*: *Mary R——*, a poor woman, aged 46, of low stature, and extremely meagre and impoverished habit, in consequence of long exposure to severe cold in the autumn of 1797, was seized with violent pain in the bowels and extremities, and two weeks after, completely lost the use of the latter. I first saw this patient in the month of *November* following, some weeks after the attack of the complaint, and found her suffering the most excruciating torture, with scarcely an interval of ease; the whole frame emaciated and debilitated to the last degree; pulse exceedingly feeble; appetite gone; and the upper and lower extremities much shrunk, contracted, and without the least power of motion. Being a little inclined to costiveness, I prescribed an aperient, namely, R. *Pil. aromat. ʒiſs. in pil. xviij. divid. ſum. iij. hora, ſomni. et repet. pro re nata.* These procured a passage, and the succeeding morning gave the following: R. *Aq. menth. pip.* ℥7. *ſpt.*

Spt. æther nitros. tinct. cinnam. c. ʒvj. m. fiat. mist. sum. coch. iij. mag. 4tis. horis. This form was occasionally varied; but no favourable change appearing, after a few days were elapsed, recourse was had to full doses of the higher class of *stimuli*, *Spt. æther vitr. æther vitriolic. tinct. opii. c. tinct. opii*, &c. were alternately administered, and the most powerfully stimulating embrocations were frequently applied to the extremities; these, however, affording only a very partial and temporary alleviation of the pain, and not the least relief of the other symptoms, were laid aside also, and the following substituted in their place. ℞. *Pulv. rad. pyrethri* ʒj. *Ol. sassafras. gtt.* 5. *cons. cort. aurant. vel mucil. gum. Arab. q. s. fiat. bolus hora*, 11*ma. matutin. et hora somni sumend.* A very sensible alteration for the better now took place, the patient experienced an almost *immediate* cessation of the pain, and in the course of a few days was able to wash and dress herself: The dose of the PYRETHRUM was then increased to *gr.* 50, and the *ol. sassafras* to *gtt.* 10. *bis in die*; the result of which was, that in somewhat less than *two* weeks she had so far recovered the use of her legs, as to be able to walk with the assistance of crutches; and by persevering in the same plan for the space of two weeks more, (excepting a slight contraction of her fingers) no symptoms of her malady remained; the pulse was become natural, the torpor of the stomach was removed, the appetite returned, and she was enabled to use her needle and attend her household business as usual.

PARALYSIS *Paraplegica. Elizabeth T——*, aged 47 years, of middle stature, and spare but not unhealthy habit, on the cessation of the catamenia, (which took place at 44), was attacked with almost insupportably violent pain, alternately in the loins and region of the uterus, attended with considerable tumefaction of the abdomen. In this state she continued for the space of *two years* and a half, during the latter part of which, her situation was rendered still more peculiarly distressing by a supervening asthmatic affection, the consequence of imprudent exposure to chill and damp air. Five months ago the pain *entirely* and *unexpectedly* left her, and eight weeks after this the abdominal tumour *wholly* and very *suddenly* subsided; the morning following which, on her attempting to raise from her bed, as usual, she found she had completely lost the use of her lower extremities, which were cold, rigid, and perfectly insensible to the touch. I was first requested to attend her the 26th of *October* last; found her situation as above described, with the pulse natural, the evacuations healthy and regular, and the appetite good. Gave the following bolus: ℞. *Pulv. rad. pyrethri.* ʒ*ss. syr. cort. aurant. q. s. fiat. bolus hora somni sumend*; and

to

to allay the ſpaſmodic irritation in the cheſt, ℞. *Aq. menth. pip.* ℥7. *ſpt. æther. nitro. tinct. opii. camph. aa.* ℥ſs.——*Zinzib.* ℥iij. *m. ft. miſt. sum. coch. iij. mag. 4tis. horis.* This enabled the patient to breathe more freely, allayed the extreme violence of the cough, and procured a few hours refreſhing reſt, which ſhe had long been prevented the enjoyment of. *October 27th and 28th*, the *boluses* were repeated; on the 29th, the warmth and ſenſibility of the lower extremities returned, and the rigidity was ſo far overcome as to admit of the free and alternate motion of the joints. In compliance with the wiſhes of the patient, the PYRETHRUM was omitted for five days, at the expiration of which, namely, on the 2d of the preſent month *November*, it was re-employed in the following (as a leſs ungrateful) form, ℞. *Pulv. rad. pyrethri.* ℥j. *ol. menth. pip. gtt.* 5. *cons. cort. aurant. vel mucil. gum. Arab. q. s. fiat. pil. No.* 18. *ſumat iij. bis in die:* And to obviate coſtiveneſs, gave occaſional and mild aperients. *November* the 5th, the patient could walk about the room with the aſſiſtance of chairs, but at this period experienced a very ſevere attack of *cholera*, (the prevailing epidemic) which reduced her ſtrength conſiderably, and the PYRETHRUM was once more neceſſarily omitted for eighteen days, in order to make way for other remedies. November 24th, again had recourſe to it, as follows: ℞. *Pulv. rad. pyrethri.* ℥iſs. *mel. anglic. q. s. fiat. pil. No.* 36. *sumat. iij. ter in die.* Under this form, have continued its exhibition until the preſent time, and with evident and daily-increaſing advantage to the patient, who hath now regained ſufficient ſtrength to enable her to walk with very ſlight ſupport; and if it is allowable to infer from previous and ſucceſsful experience, have no doubt that in a few weeks I ſhall have it in my power to announce her entire recovery.

LUMBAGO. *Thomas S——*, ſeaman, aged 26 years, of tall ſtature, ſtrong, athletic make, and remarkably healthy habit, on the 10th of *November* inſtant, was ſeized with very ſevere pain and great rigidity in the muſcles ſituate on the loins; on the 12th I was requeſted by the owner of the ſhip to which he belonged, to attend him, and ordered the following: ℞. *Spt. terebinth. ol. olivar. aa.* ℥vj. *aq. ammon. pur.* ℥ſs. *M. fiat. liniment. purt. affect. ter in die applicand.* ℞. *Tinct. opii. gtt.* 60. *T. opii, camph. ſpt. æther. nitros. aa.* ℥ſs. *M. sumat. coch. j. parv. 4tis. horis, in aq. font.* On the 13th found the ſymptoms more violent than before, and the patient complaining of coſtiveneſs, gave as follows: ℞. *Calomel. gr. vj. cons. cort. aurant. q. s. fiat. bolus hora somni ſumend:* ℞. *Infus. sennæ* ℥vijſs. *natron. vitriol.* ℥iſs. *ſacchar. rubr.* ℥ſs. *M. fiat. miſt. sum. coch. iij. mane. et repet omni hora pro re nata.* Theſe anſwered the purpoſe

poſe of opening the bowels, but yielded no other relief. On the 16th, the pain and ſtiffneſs were preciſely the ſame, and the integuments of the part had acquired a livid hue. The form of the anodyne, preſcribed in the firſt inſtance, was now varied, and re-employed as follows: ℞. *Tinct. balſam Peru* ʒj. *Opii gtt. lx. fiat. tinct. sum. coch. j. parv. 4ts. horis. in aq. hordeat.* This afforded a momentary alleviation of the pain, which however returned on the 17th, as ſevere as before. Baffled in my expectations from every means hitherto employed, had recourſe to my *forlorn hope*, and favourite remedy, the PYRETHRUM, in the following form: ℞. *Pulv. rad. pyrethri.* ʒij. *mel. anglican. q. s. fiat. elect. sum. coch. j. parv. 3tiis. horis.* The firſt doſe abated the violence of the ſymptoms; in about 18 hours, the patient had taken the whole of the electuary, and in little more than 24, the pain and ſtiffneſs were entirely gone, the integuments had re-gained their natural colour, and not a trace of the malady remained.

INTERMITTENTES. *Pyrethrum* furniſhes a highly uſeful addition to the *cinchona*, in the cure of intermittents; I have employed it in conjunction with the latter article, in various caſes of obſtinate TERTIAN, and with uniformly good effect. On thoſe occaſions, it was commonly exhibited under the following, as the moſt eligible form. ℞. *Pulv. rad. pyrethri.* ʒij. *pulv. cort. cinchonæ, flav.* ʒj. *syr. cort. aurant. q. s. fiat. elect. sum. coch. j. parv. 3tiis. horis absente febre.* The mention of the efficacy of the PYRETHRUM, in caſes of this nature, recalls to mind a rather curious circumſtance related to me ſome time ago. An ingenious mechanic, formerly a neighbour of mine, having read in ſome old author of the virtues of the pellitory of Spain, undertook to adminiſter it in large doſes to perſons labouring under ague, and found it, in all reſpects, a moſt effectual ſpecific. His invariable plan of treatment was, immediately on the acceſſion of the chill ſtage, to order the patient to bed, then give two drachms of the powdered root in warm ale, one drachm at the end of two, and the ſame quantity at the end of ſix hours, in like manner; a profuſe ſweat enſued, and on its going off, the patient roſe perfectly recovered. And further, however improbable or remarkable it may appear, out of *hundreds* in which this *red-hot* practice was adopted, not a *ſingle inſtance* occurred, in which it failed of ſucceſs. The intimate perſonal knowledge I had of the character of the man, leaves me no room to doubt the truth of the relation, which I had from his own mouth.

ODONTALGIA. *Pyrethrum* hath long been in high requeſt with the *dentiſts*, and forms the baſis of various advertiſed noſtrums for the *tooth-ache*: its efficacy, indeed, in caſes of this kind,

kind, hath from time immemorial been known to the vulgar, who frequently find a remedy in the ſimple maſtication of the root. In thoſe *rheumatic affections* of the *maxillæ*, to which many perſons are ſubject in certain ſtates of the atmoſphere, I have occaſionally ſeen it peculiarly uſeful, either employed in the manner above-mentioned, or in the form of pills or tincture, as follows: ℞. *Pulv. rad. pyrethri.* ʒj. *mucil. gum. arabic. q. s. fiat. pil.* 12. ℞. *Pulv. rad. pyrethri.* ʒx. *spt. æther. vitriol. C. vel spt. vinos. rect.* ℔j. *infund per dies decem, et cola, postea adde camphor.* ʒj. *ol. roresmarin.* ℥ſs. *tinct. opii* ʒij. *fiat. tinct.* When the tenderneſs or tumour of the gums had rendered the maſtication of the root impracticable, one or more of the pills (firſt dried, in order to render their ſolution more gradual,) were held in the mouth, until diſſolved, or a piece of lint moiſtened with the tincture, was applied to the painful part, and repeated as occaſion required.

PARAPHONIA *rauca.* In ſeveral caſes of *chronic hoarſeneſs* and *deprivation of the voice*, ariſing from ſevere attacks of catarrh, and attended with tumour and relaxation of the fauces, as a topical application, I have made uſe of the following watery infuſion of the PYRETHRUM. ℞. *Pulv. rad. pyrethri.* ʒij. *ad.* ℥ſs. *infund. in aq. bullient.* ℥8. *per horas duas cola et adde spt. vinos. rect.* ℥ſs. *fiat. gargarism.* frequenter utend. (A form ſomewhat ſimilar is employed in St. Bartholomew's Hoſpital.) In ſome few inſtances, this was productive of at leaſt temporary benefit to the reſpective patients; but as the *pellitory* giveth out its active principle very imperfectly to aqueous menſtrua, permanent advantage can ſcarcely be expected from *formulæ* of the kind above-mentioned; I have no doubt, however, that a uſeful remedy would be found in a ſimple tincture of the root, on the like occaſions.

In addition to the foregoing, numerous other inſtances of the efficacy of the ANTHEMIS *pyrethrum* (which have occurred ſince the commencement of this eſſay,) might be ſtated, but the FACTS adduced above may probably ſuffice to promote a more extenſive trial of its virtues. Before cloſing the ſubject, however, a few practical obſervations on the *doſe*, *form of exhibition*, *mode of operation*, and *ſenſible effects* of this remedy, may not be altogether improper.

In ordinary practice, the doſe is from ten to forty grains, every four, five, or ſix hours, according to the age and ſtrength of the patient, and the circumſtances of the caſe: but when an extraordinary ſtimulus is required, experience hath ſhewn, that it may be extended to ℥ſs, or even more, in the courſe of the 24 hours; and with the beſt effects, provided it be given

in

in such portions, and at such intervals as the stomach can conveniently bear.

These remarks will, of course, be understood, as referring to the *pyrethrum* in substance, in which state only, and from necessity rather than choice, I have hitherto employed it for internal purposes, for the most part combined with *honey*, or *mucilage*, in the form of *bolus* or *electuary*. The quantity, however, requisite on many occasions for a dose, added to its unpleasant pungency, renders it to most, a nauseous and ungrateful medicine. It is much to be wished, therefore, that the shops could be supplied with an *extract*, carefully prepared with rectified spirit, which, as possessing the virtues of the root, in a small volume, and concentrate state, would be abundantly preferable to every other form.

As it is intended that the "THEORY OF STIMULI" should form the subject of a future essay, in elucidation of the *modus operandi*, it may suffice for the present, to remark in a brief and general way: *First*, That in *local* affections connected with, or dependent on *diseased action* of, or *deficiency of power* in some part of the *muscular* or *nervous systems*, it appears, with certain constitutions, to operate as a *sympathetic* or *indirect stimulus*, most probably by exciting in the nervous distribution of the stomach, (the *main spring* of our mechanism,) a *specific* and *healthy action*, which through the same medium of the nerves, *sympathetically* counteracts the morbid and irregular motions, or overcomes the torpor and debility constituting the complaint.

Secondly, In other habits, and in similar affections, it acts as an *immediate* or *direct stimulus*, producing exactly analogous effects, by a *local* application of its active principle (conveyed through the channel of the circulation) to the part affected.

The first of these *rationalia*, seems supported by the sometimes *sudden*; and the second, by the more generally *gradual* manner, in which the *pyrethrum* allays rheumatic pains of the joints and extremities, removes the rigidity, and restores the lost warmth of paralytic limbs.

In this *two-fold mode of operation* then, namely, as a *specific stimulus* and *local tonic*, does this useful remedy (when judiciously managed) tend, in different diseases deriving their origin from indirect debility, to restore and maintain the EQUILIBRIUM OF HEALTH; exhibited in an over-dose, however, or without that previous preparation which peculiarity of constitution or accidental circumstances frequently renders requisite, it occasionally excites the most inordinate and violent action in various parts of the system, such as nausea of the stomach and severe vomiting, tormina of the bowels, and excessive

ceſſive diarrhœa, diſtreſſing head-aches, and painful anxiety, eſpecially in bilious habits and ſuch as labour under habitual dyſpepſia. In the firſt inſtance, therefore, it will be neceſſary to premiſe an *emetic*; in the latter, ſome mild *ſtomachic*; and in every caſe, coſtiveneſs muſt be obviated by occaſional *aperients*, ſuch as the *Pulv. rhabarbari, pil. ex aloe cum myrrh or ol. ricini.*

Laſtly, Should the length to which this ESSAY has been extended appear to require an apology, the writer would beg leave to remark, that from a wiſh to reſcue from neglect and oblivion, one of the moſt *potent* and *valuable* articles of the MATERIA MEDICA, he was induced to prefix to the various proofs of its *medicinal* powers, with which individual experience and attentive obſervation had furniſhed him, the *botanical*, *natural*, and *medicinal* hiſtory of the ANTHEMIS *pyrethrum*, under the conviction of its contributing to that end; and conceives ſuch addition will not be conſidered ſuperfluous or impertinent, when (as containing beſides ſome original, he believes every ſcattered ray of relative information collected into one focus from the moſt reſpectable authorities,) it not only ſupplies a comprehenſive and ready reference, (particularly to thoſe not in poſſeſſion of the valuable works of *Gerarde* or *Dr. Woodville*) but may alſo in a great meaſure ſerve as a *neceſſary guide* to ſuch practitioners as are not previouſly acquainted with the *pyrethrum*, in their choice of it, (on which, in the firſt inſtance, all hopes of ſucceſs depend) as what is found in the ſhops is commonly ſo much injured by time, damp, or worms, as to be utterly unfit for uſe.

In reference to the reſpective CASES, it is hoped, that as the ſeveral circumſtances of each are detailed with the ſtricteſt fidelity, although tedious in the relation, they will be found poſſeſſing ſufficient importance to plead their own apology.

It is with ſome a matter of regret, however, that the *literary labours* of thoſe engaged in the *medical* profeſſion do not always poſſeſs the advantages of *correctneſs* of compoſition and *elegance* of ſtile. Deeply aware of the numerous defects of that nature in the preſent attempt, the Author can only obſerve, that while the momentous and indiſpenſible engagements of profeſſional men allow them little leiſure to attend to the *extrinſic embelliſhments* of language, they afford ample opportunity for the attainment of what is of infinitely greater conſequence, (and of which he truſts that candour will allow he has availed himſelf to the utmoſt) *intereſt* and *accuracy* in point of FACT.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

AS the preſervation of Vaccine matter is important, for conveying it to diſtant countries, and for ſecuring a ſteady progreſs of the new inoculation in remote parts of our own country, where freſh Vaccine matter cannot be frequently procured; I am inclined to believe you will not think the following fact unworthy of your notice, eſpecially as Mr. Hill, in the laſt number of your Journal, ſpoke of the means of preſerving Vaccine matter, and gave preference to a method leſs to be approved than that which I have adopted. He miſtook what I mentioned incidentally in a provincial news-paper. I recommended, that the matter be incloſed between two pieces of glaſs, folded in paper. It is thus more perfectly ſecluded from air than when put into a phial. In this way I firſt received Vaccine matter from Dr. Jenner, as active as when freſh and fluid. I have lately preferred putting the two pieces of glaſs together, while the matter on them is ſtill moiſt, by which means all air is exeluded, except from the margin, and that, if it be thought injured, may eaſily be removed when the matter is uſed.

I have for many months intended to make ſucceſſive inoculations with Vaccine matter of advancing age, to aſcertain how long it may be preſerved; but I have not hitherto executed my purpoſe. One experiment, however, ſhews that it may be preſerved long enough to be conveyed to very diſtant countries. On the 11th of February, David Collier, a year and half old, was inoculated with Vaccine matter taken on the 23d of October, and preſerved in the manner deſcribed. He has taken the diſeaſe, which now appears in a perfectly regular form, although he has twice ſcratched off the ſurface of the riſing veſicle. In this inſtance, the matter, ſixteen weeks old, ſeemed in no reſpect leſs active than the fluid taken immediately from a recent veſicle.

The preſervation of Vaccine matter might be more certain, if the edges of the glaſſes put together were bruſhed over with ſpirit varniſh, or ſealing-wax diſſolved in ſpirit of wine: If the two pieces of glaſs were of unequal ſize, the larger would leave a margin, on which the varniſh lodging might form a perfect ſeal againſt air and water. Matter thus ſecured might probably be defended againſt the injury of hot climates, by being folded in oiled ſilk, and put in jars full of water, to prevent it being injured by motion; and theſe jars, when occaſion required,

required, might be kept cool by being plunged in veſſels of water, often repleniſhed, and ſuffered to evaporate.

It is much to be wiſhed, that the bleſſing of Dr. Jenner's great diſcovery were imparted to our diſtant colonies: As ſome attempts to convey Vaccine matter to the Weſt Indies have failed, any means that offer a chance of conveying it ſafe, deſerve attention. If eaſier methods fail, it may probably be conveyed to any place, however diſtant, by inoculating cows or human beings in ſucceſſion during the voyage.

In temperate weather, Vaccine matter may be kept fluid many hours, if it be inſtantly encloſed between two pieces of glaſs. But I think no advantage can be derived from preſerving it fluid, if that be poſſible for any conſiderable time, ſince in a dry ſtate it is leſs likely to ſuffer chemical change. It becomes hard, not merely by evaporation of moiſture; it ſeems to coagulate; for when evaporation is impeded, it ſtill grows thick; and the dried matter does not form a perfect ſolution in water.

While writing on the ſubject, allow me to tranſcribe a paragraph from that letter in the news-paper to which Mr. Hill alluded. I wiſh to know whether my ſuſpicion be confirmed by the obſervation of any other perſon. "In four inſtances, in which inoculation was made with matter dried on lancets, a bit of thread imbued with matter from ſome other patient was placed on the inciſion: In one, the Cow-pox had the regular courſe; in the three others, it was ſo different in the earlier ſtages, that I entertain a doubt whether thoſe patients be ſecure againſt the ſmall-pox, and ſhall inoculate them again. Theſe facts ſuggeſt the precaution, not to inoculate with matter from two patients at once. If future experience do not juſtify this caution, it will, in the mean-time, be attended with no inconvenience." This was written on the 10th of October; ſince that time, care has been taken, that a lancet uſed in puncturing one veſicle, was well waſhed before it was uſed for another, and that matter from two patients was in no way blended. I have ſince ſeen no irregular caſes, when I had not reaſon to believe that the uſual progreſs of inoculation was diſturbed by violence done to the inciſion; and none in which any troubleſome ulceration occurred, though that happened to two of the three patients mentioned in the paragraph juſt quoted.

The inference Dr. Watkinſon drew from the facts ſtated in his book, and from the bills of mortality quoted by Mr. Franks, do not merit unreſerved aſſent; but I know not whether it be worth while to enter farther into this diſcuſſion; however, I will not at preſent intrude longer on your patience. I am, &c.

York, Feb. 21, 1801. R. CAPPE.

Case of Vaccine, by Mr. T. POLE, Surgeon.

THE Vaccine Matter I received ſometime ſince from my friend Dr. Jenner, I employed for the inoculation of Frances Cannon, a girl, about 14 or 15 years of age, of the ſanguine temperament; I inſerted it into both arms in the uſual place. I examined the punctures on the third day after the inſertion, and reported that the matter had taken effect; from there being a ſlight prominence, an inflammatory redneſs extended a ſmall diſtance round the puncture. I ſaw her again on the ſixth day, the elevation, or inflammation of the part, had not at all increaſed ſince the firſt examination; I then was ready to conclude it had not taken effect. On the eighth day I ſaw her for the third time, and from there being then no advancement of the inflammation, and the natural Small-pox being in the houſe where ſhe lived, the family were ſolicitous to have her inoculated from that patient, leſt ſhe ſhould take it naturally; to which I conſented, and it was accordingly done in one arm only, about an inch and a half from the vaccine puncture. On the third day from the variolous inoculation, I ſaw the patient, and was fully convinced that each of the two vaccine, and the variolous inoculation, had all taken effect; this circumſtance gratified me much, conſidering it as one of the faireſt opportunities for the vaccine diſeaſe to ſhew its effects upon the variolous; the patient being firſt inoculated with the vaccine, and on the eighth day with the variolous, and was alſo expoſed to the contagion of the latter. Both the diſeaſes went on together without interfering with each other, until the inflammation extending from the vaccine puncture ſurrounded that of the variolous, and the ſyſtem became evidently affected by febrile ſymptoms, attended with head-ache. On the fifth day the variolous infection was arreſted in its progreſs; the puncture was elevating, and the inflammatory circle was ſpreading in its ordinary courſe till that time, after which it made no farther progreſs. A very ſmall quantity of matter formed in its centre, about three times the dimenſions of a common pin's head, and then died away: the vaccine puſtule took its courſe in all reſpects, excepting its remaining almoſt inactive for the firſt eight days, of which I do not remember an inſtance occurring before; but if there is any thing in this caſe worthy of more public notice, Dr. Jenner is at liberty to make what uſe of the communication he may think proper; and if he will oblige me with any obſervations on the caſe, I doubt not of their utility to myſelf and others, on ſo new and important a diſeaſe, to which he has ſo worthily called the ſerious attention of at leaſt both Europe and America.

Leadenhall Street, March 17, 1801. T. POLE.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IN the as yet undetermined ſtate of the public mind, relative to the utility of inoculating with the Cow-pox, I am induced to lay before you the following caſe, which happened on board his Majeſty's ſhip Gibraltar, in Auguſt laſt. If you ſhould deem it worthy of a place in your moſt valuable Publication, you are at liberty to inſert it. I am, &c.

MONTGOMERY BOSWELL,
Surgeon, Royal Navy.

His Majeſty's Ship Gibraltar, cruiſing off Cadiz, Jan. 12, 1801.

William Burnell, landſman, aged about 42 years, when ſervant to a farmer in Devonſhire, had the Cow-pox; ſince which period he has entered into his Majeſty's navy. In Auguſt laſt the variolous infection having made its appearance amongſt the ſhip's company, thirteen of whom having caught it, did well, it proving to be a very fine pock of the diſtinct kind. This man, viz. William Burnell, being one of the people appointed to attend the ſick, (and never having had the Small-pox) was anxious that I ſhould inoculate him, which I did; and to ſecure ſucceſs, inſerted the variolous matter in both arms. On the fourth morning I found a conſiderable degree of inflammation, which appeared to indicate a certainty of his having the Small-pox; but in ſix days after, the inflammation totally ſubſided, without any puſtule having formed. At the expiration of three weeks, I again inoculated him in the manner as mentioned above, producing exactly the ſame appearance as before.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

I Obſerve in Number XXIV. of the Medical and Phyſical Journal, a caſe of Apoplexia Hydrocephalica, related by Dr. Garnett, wherein the ſymptoms and progreſs of the diſeaſe are related with equal perſpicuity and exactneſs, giving an opportunity for many very valuable remarks. I am convinced of the great

great utility which refults from the publication of the fuccefsful cafes of thofe difeafes, which are rather unfrequent, and moft generally fatal, which induces me to prefent the following ideas, deduced from a minute attention to the annexed cafe.

Maſter L——, aged about 8 years, the ſon of a medical gentleman of judgment and ability in his profeſſion, a child of a remarkably active, volatile diſpoſition, and acute underſtanding for his years, became ſomewhat indiſpoſed about the latter part of October, or the beginning of November, 1800, being then at a conſiderable diſtance from home; at which time he was under the care of a medical gentleman in the country, but continued getting gradually worſe till the laſt week in November, when he was brought home. His father, at firſt view of him, was very much alarmed, for his appearance was ſuch as to give him ſerious apprehenſion with regard to his preſent ſafety: his debility was ſo great, that he could not ſupport himſelf on his feet, and ſymptoms were ſo extremely urgent, that it was not expected that he could ſurvive through the night. From the aſſemblage of ſymptoms, it appeared to his father, that his diſeaſe was hydrocephalus; he therefore immediately gave him a tolerably large doſe of jalap and calomel, applied a bliſter to the nape of the neck, and the following day began the adminiſtration of calomel, in union with ſquills; and, on account of the extreme debility, as much of the cinchona in ſubſtance as the ſtomach could bear.

But as the ſymptoms continued of a very diſagreeable nature, and not chuſing to rely ſolely on his own opinion in ſuch a caſe, he requeſted me to meet himſelf and another medical gentleman, which I accordingly did, on the 4th of Dec. 1800, a few days after his return home.

On examining into his ſenſations, we found that he referred all his diſeaſe to his head, which he ſaid was in almoſt conſtant pain, particularly on the vertex, which was conſiderably increaſed by preſſure; but although the pain was conſtant in ſome degree, yet it was not equally ſo, for ſeveral times in the day it became ſo much more violent, as to deprive him of ſenſe for the time: He would frequently ſhriek out in his ſleep; awake ſuddenly; and if not prevented, ſtart from his bed. He appeared to have loſt all his activity, and to be ſunk in a kind of ſtupor, particularly on the exacerbation of pain. The pupils of his eyes were dilated, and the iris appeared very inſenſible, contracting very little on ſudden expoſure to light, which however, he ſeemed to wiſh to avoid as much as poſſible, by turning his face from the window or candle. A degree of ſtrabiſmus exiſted, being very conſiderable when the pain was the greateſt, at which time his ſight was very imperfect.

His

His eyes had loſt their power of directing him with exactneſs to any object; for if he was deſired to touch any thing at arm's length, he could not directly guide his hand to it, but always conſiderably to one ſide. He complained of pain on any ſudden motion, eſpecially of his head, which he always moved very ſlow; nor could he turn it round, without at the ſame time moving his body.

His pulſe was ſlow, ſmall, and remarkably irregular.

His bowels were very much inclined to coſtiveneſs, being very little acted on by cathartics of a powerful kind.

He had frequent flushings, and often ſickneſs of the ſtomach and vomiting.

He had leſs debility than at his return home, which ſeems to be owing to his having taken very freely of the bark.

The quantity of urine has been increaſed by the exhibition of the ſquills.

On contemplating theſe ſymptoms, it appeared to us that they aroſe from preſſure of ſome kind upon the brain; and as there had been no known blow, or other external injury, and being no appearance of any, we concluded that the diſeaſe Hydrocephalus exiſted; and under this idea our mode of treatment was conducted.

It was agreed, therefore, that the head ſhould be ſhaved, and a bliſter applied over the whole ſurface of the ſcalp, and kept open for a conſiderable time.

That he ſhould continue taking the bark in the ſame form as he had begun it, which was as follows.

R. Pulv. cort. cinchon. flav. ʒj. Tinct. gentian. c. ʒß. Aq. diſtill. ʒiijß. M. Cap. coch. ij. ampl. 4 q. horâ.

And every other morning the following powder.

R. Calomel præp. Gum. Gambog. pulv. aa. gr. iv. M. ft. pulv.

That he ſhould take a moderate quantity of red wine daily.

Our intention in the powder was to produce a very briſk cathartic effect; in which, however, we were at firſt diſappointed, as this doſe had no viſible effect; it was gradually increaſed till he took of calomel and gamboge each eight grains, which quantity, after remaining rather more than half an hour upon his ſtomach, cauſed gentle vomiting, and only one or two ſlight alvine evacuations; the ſame effect reſulted from the addition, at one time, of ten grains of pulv. jalap to the above doſe; and at another time of aloes ſocot. gr. xv. But wiſhing to produce a ſtill greater degree of action on the inteſtines, our purpoſe was at length very effectually anſwered by the following.

R. Calomel præp. Gum. gamb. pulv. aa. gr. viij. Elaterii pulv. gr. ij. M. ft. Pulv. altern. auror. ſum.

This

This produced very brisk evacuations at each time of repeating it; after each repetition, however, he appeared better and more lively. The plan was continued for several weeks, during which every symptom of the disease gradually subsided, until his pristine state of health was completely renewed.

In the paper before alluded to, by Dr. Garnett, much doubt seems to be entertained, whether such a disease as the term Hydrocephalus in reality imports, ever exists, except as a consequence of another disease whose proximate cause is an increased plenitude of the vessels of the brain, which the Doctor thinks is alone sufficient to produce all the symptoms which are definitive of the Apoplexia Hydrocephalica of Cullen. If such indeed were the case, the strict antiphlogistic treatment would certainly be that from which most success could be expected. In the first instance, very probably, the disease may consist of increased determination to, and fulness of, these vessels; but in the above case, I am really of opinion, whatever might have been the state of the parts at the first attack, that at the time the above plan was prescribed, effusion had actually taken place, as such plan was not altogether adapted for the relief of symptoms merely arising from increased plethora.

Under the idea, then, that effusion of serum has taken place, the indications of cure certainly must be to excite an increased action of the absorbent vessels, at the same time we give tone and vigour to the general system, as in other cases of dropsical accumulation. Much has been said of the use of mercury in these cases; given, not as a cathartic, but in such a way as to excite what may be called the mercurial action in the system; and some physicians, of undoubted eminence in their profession, administer it in such a manner as to produce copious ptyalism as speedily as possible. It is certain, indeed, that mercury is a powerful promoter of absorption, yet the debility it occasions is frequently extreme, which is a circumstance much to be avoided in this disease; we even find, that by the continued use of mercury, either the action of the exhalents is so much increased, or that of the absorbents so much decreased, that dropsical accumulations are produced; as we not unfrequently find that anasarcous swellings are the consequences of a mercurial course: For, probably, although the mercury at first excites the absorbents to a more energetic action, yet, after a time, these vessels, being governed by the same laws which influence all moving fibres, suffer increased debility as the consequence of this excess of action.

If we suppose that no dropsical accumulation has taken place, but merely increased determination to the head, can we expect advantage from mercury, as being a powerful stimulant

lant, and increasing very much the action of the arterial system? To obviate these effects, Dr. Garnett, in the case above alluded to, unites it with Digitalis, a medicine well known as the most powerful of all sedatives.* There is no doubt that many cases have been treated by the mercurial plan with success; but seldom, I believe, has mercury been accompanied with cathartics, blisters, and other remedies.

Another reason why we omitted the mercurial treatment in this case was, that in the course of the last year one gentleman assured me that he had had opportunities of opening no less than six heads of patients who had died with the symptoms of this disease, in all of whom the mercurial treatment had been carried to its full extent, and in all there was a considerable effusion of serum in the ventricles.

Therefore it appears to me, that drastic purgatives, frequently administered, have a much fairer chance of success by increasing very powerfully the action of the absorbents, while they do not produce that debility of the system, which is the consequence of mercury; at the same time that the strength is prevented from failing, or the pristine vigour re-established, if it has already begun to fail, by the administration of the cinchona in such doses as the stomach will retain; not, however, omiting what I conceive to be the most powerful of all the remedies employed, a blister to the head, to be kept discharging for a length of time.

Whether this mode of treatment, which has so happily succeeded in the present case, will be equally successful in others, or whether it will prove effectual in as large, or a still larger proportion than those which terminate to our wishes by the mercurial plan, experience can alone determine. The case, as it is, I have impartially related; and I think, that every successful case of a disease so frequently fatal as the Apoplexia Hydrocephalica, should be made known. I am, &c.

J. RICARDS,
Member of the Royal College of Surgeons, London.

Brentford, Feb. 16, 1801.

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* Quere, Does not the good effects of mercury depend on the acceleration it produces in the circulation? And would not digitalis, or other powerful sedatives, prevent those good effects in the treatment of Lues? &c.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I Take the liberty to communicate the following remarkable caſe for your conſideration; I do not know that it will throw any light on the healing art, its ſingularity only prompted me to the detail, which probably you may think worthy a place in your valuable publication. I am, &c.

Stockton on Tees, Feb. 26, 1801. W. MILBURNE.

Joſeph Rodgers, aged 50, about four miles from Stockton, on the 12th of December 1800, cut his throat with a razor in the moſt determined manner. He had firſt paſſed the razor over the larynx and pharynx, dividing thoſe from the upper parts: he then made another inciſion about three inches below, through the trachea and œſophagus; not finding this effectual, he diſſected out the divided parts, with the os hyoides, epiglottis, and attendant muſcles and integuments, &c. The inſtrument had not been keen, as it appeared from the cartilaginouspart of the trachea to have been cut through at repeated ſtrokes. He was found ſoon after in a garden, ſitting on his knees, his body leaning forward over a piece of timber, (the razor and parts diſſected, with a quantity of blood, lying at his feet) to all appearance dead. Cloths were immediately applied round his neck to cover the frightful wound, and he was conveyed to a houſe; in a few minutes he began to ſhew ſigns of life, and in half an hour, walked up one pair of ſtairs unſupported to bed; I then was ſent for, found him perfectly collected, and from ſigns, ſorry for what he had done. On removing the cloth to examine the wound, the preſſure of external air on the lungs threatened inſtant ſuffocation, which being immediately covered, he ſeemed perfectly at eaſe, in which ſtate he continued to the eighth day, and expired completely exhauſted.

P. S. If it is requeſted, I ſhall ſend the parts wounded, which are preſerved in ſpirits.

A Case of White Swelling cured by Electricity; by JOSEPH LAMB, *Surgeon.*

A Middle aged woman being afflicted with a ſcrophulous affection in the right knee, (commonly termed a white ſwelling;) and being in low circumſtances, was ſent to the Northampton Infirmary,

Infirmary, where she was under the care of Dr. Carr for almost two years. The usual remedies were applied without effect: she had also lost her speech, for which she had seven caustics applied to her back, with blisters, &c.—These at first seemed to relieve her, but on taking the slightest cold, her speech would go again and leave her quite hoarse. After all the remedies had been tried without success, and being of a very weak constitution, she was thought to be an improper subject to undergo the operation of amputation, and was at length discharged, which took place a considerable time before I left London. She has been afflicted with this complaint about seven years altogether, and with great difficulty could she walk with crutches. The latter end of last summer she applied to me for advice, being in violent pain. It will readily be believed that I was at a loss to know in what manner to proceed, she having previously had such excellent advice. The only thing that appeared to me at all likely to give her the least relief was electricity, which I accordingly proposed to her, and she consented to suffer a trial. I gave a few gentle shocks in a variety of directions through the affected part, and also thro' the chest, which to my great surprise restored her voice immediately, and it continued several weeks; but by taking a violent cold, she lost it again; however, two or three shocks recovered it. The pain and hardness in the knee began to decrease, which had been so long contracted. I repeated the electricity three times a week until the present time, and am happy to say that she is quite recovered of her lameness, to the astonishment of all who knew her. The tumour is entirely dispersed, and she can walk without her crutches, either up stairs or down, which she had not been able to do for seven years past.

Kings Sutton, near Banbury, March 14, 1801.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE following is a Case of Epilepsy, cured by Electricity. Should it meet your approbation, so as to merit its insertion in your valuable publication, by so doing you will much oblige,

Your's, &c.

Bishopwearmouth, Feb. 23, 1801. W. HODGSON.

Mary Hill, the subject of the case, a young girl about eight years of age, had been afflicted with the complaint previous to my seeing her for three years, during which time she was attacked every day with three or four fits, lasting an hour or more each time; the effect sometimes being so great as to cause a suspension of the intellectual powers for the space of eight weeks, accompanied with a loss of speech and power of using her limbs. She had taken several medicines recommended in such cases before the use of the machine, but entirely without benefit; then, as the last resource, I determined to try the effect of electricity. During the first week of using the remedy, the fits, which were then very severe, were surprisingly reduced to one every other day; and from that time disappeared, only at intervals, in the second week, feeling a propensity to sleep, which was succeeded by symptoms of an approaching fit; none, however, was the result, and she has never had a return except once, about three months after, being in consequence of her father having reprehended her severely for some fault.—The remedy, which had been discontinued after the use of it six weeks, was again applied to with its former success; three years have since elapsed, and she is now in the most perfect health.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE following are two cases of dropsy, cured by Digitalis; if you think them worthy of a page in your Journal, you will oblige me by inserting them.

I remain, yours, &c.

J. S. SWIFT, Surgeon, Royal Navy.

Jersey, Feb. 18, 1801.

December 4, 1800, I was requested to see Mrs. B. at Hardway, near Portsmouth, aged 52, who had been afflicted with ascites nearly four years. Symptoms were, a fluctuating tense abdomen, an irregular quick pulse, continual thirst, paucity of urine and pale, with impeded respiration: I gave her the following mixture, viz. ℞. Inf. Digital. ℥viij. ſpt. æther. nitros. ℥ſs. M. ſumat ℥i. ter die.

5th. Complains of a little griping, otherwise much the same. Rep. Mist. add. Tinct. Card. Comp. ℥iij.

6th.

6th. Bowels easy; voided three pints of urine in the last twenty-six hours. Having very little rest by night, I gave her an anodyne, (which was repeated occasionally during the cure). Rep. Mist. ut heri.

7th. Much as yesterday. Rep. Mist.

9th. Upon an average, she voids a quart of urine every ten hours; breath more free. Rep. Mist.

14th. Pulse more regular, swelling considerably diminished. Rep. Mist.

16th. Being costive, she took a laxative, and repeated the mixture, with a nourishing diet, until January 10th, 1801, when her body was reduced to its natural size, and every other symptom of ascites gone. She then took the Cort. Peruv. et Pulv. Aromat. until the 30th following, when she found herself quite recovered.

January 2, 1801, I saw T. Mason of Elson, near Portsmouth, aged seven, who had oedematous swelling of the head, body, &c. very little urine, and pale, continual thirst, and every other symptom of anasarca, was perfectly cured by the same treatment as Mrs. B's, in the space of six weeks.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

HEREWITH I transmit you a few Remarks on the Os Orbiculare Auris. They contain no new information relative to that bone; but as the publication of them may be the means of eliciting it from those who are better informed than myself, I shall be highly obliged by the early insertion of them in your Journal. I am, your's, &c.

Trowbridge, Mar. 11, 1801. J. M. M.

The Ossicula Auditûs are usually described by modern Anatomists as being four in number. With regard to two of these, the Incus and the Malleus, it is uncertain when, or by whom, they were discovered. To Vesalius, they owe the names by which they are at present distinguished. The Stapes appears to have been discovered by Ingrassias, in the 15th century; though the discovery has also been attributed to Eustachius, Columbus, and Vesalius. The Os Orbiculare was probably the last of the four bones that was discovered, Francis Sylvius being

being the person to whom the discovery is attributed; though Morgagni thought that traces of a knowledge of it were to be found in the writings of Arantius.* Since the time of Sylvius, most Anatomists have considered the Os Orbiculare as a perfectly distinct bone, and one that is constantly to be met with in the human subject. I was surprised therefore to find, that Soemmerring, in his treatise *De Corporis Humani Fabrica*, notices among the Ossicula Auditûs only the Malleus, Incus, and Stapes. Of the last of these he says, "Minimum hocce totius corporis humani os." † And in describing the Incus he has these words, "e superficiei externæ (sc. *cruris anterioris*) extremo semigloboſum aut ovatum, numquam vel rarissime penitus separatum capitulum ope colli tenuis eminet,‡ quod noxum incudem inter et stapedem fixit."§ A few lines farther on he says, "Nonnumquam exiguum osſiculum malleum inter et incudem observatur." ‖

The only modern author I have been able to consult, that agrees with Soemmerring is Jenty, who says, that the Os Orbiculare "is not truly a distinct or separate bone, but is merely an epiphysis of the longer leg of the Incus." ** Jenty's work, however, is a mere compilation, and he has neglected, on this occasion, to give us his authority; so that it is impossible to determine what degree of weight must be attached to the remark. Few of your readers will be disposed to doubt the accuracy of Soemmerring; as few probably will be willing to allow his authority to outweigh that of almost all other Anatomists. In order, therefore, to determine whether the Os Orbiculare Auris ought to be reckoned among the bones constantly to be met with in the human subject, I beg leave to propose to practical Anatomists the following queries: 1st. Whether this bone, when it is met with, is not found to occupy different situations in different subjects? 2d. Whether it is not frequently wanting altogether?

If these queries should be answered in the affirmative, it will then appear that the Os Orbiculare is no more to be reckoned a distinct bone of the body than the Ossa Triquetra.

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* Vid. Sabatier Traité Comp'et d'Anatomie, tom. ii. p. 342.

† De Corp. Human. Fab. tom. i. p. 136.

‡ "Vel in infante recens nato hoc osſiculum cum incude coalitum invenitur." *Camper Verhandelingen te Haaerlem*, 1767, Vol. viii. part 2, p. 209.

§ De Corp. Human. Fab. tom. i. p. 135.

‖ Idem.

** Anatomico-Physiological Lectures, vol. i. p. 77.

Extract

Extract of a Letter from Dr. DE CARRO* *to* Dr. JENNER, dated Vienna, Feb. 14, 1801.

IN the neighbourhood of Vienna I had lately an intereſting proof of the philanthropy of a clergyman, and of the good which that claſs of men can do, when they chuſe to do it. I had inoculated four children of a gentleman living in the village Brunnam Gebizg: the reſpectable curate of that pariſh, made daily obſervations on the inoculation of theſe children, and was aſtoniſhed at the ſlightneſs of the diſeaſe. He was particularly ſtruck with the perfect likeneſs of the puſtules with your beautiful copper plates. He wiſhed to inform himſelf upon the ſubject of the Vaccine Inoculation, and ſoon convinced himſelf ſo fully of the importance of the diſcovery, that the next Sunday he gave from the pulpit the hiſtory of the Cow-pox Inoculation, and its immediate advantages; and concluded, by a very paternal and ſenſible exhortation to his pariſhioners, to avail themſelves of the benefit of it. He adopted this meaſure that he might aſcertain the confidence they had in his directions, and their affection for their children. His harangue had ſuch a happy effect, that the next Tueſday, the day fixed for my viſit to the village, I found thirty-eight children waiting for inoculation; and in three ſubſequent viſits I have inoculated more than eighty perſons. The diſtance of that place from Vienna not allowing me to go there ſo often as I wiſhed, the phyſician of the place, Dr. Ibezer, continues the Vaccine Inoculation, which has ſo much charmed all thoſe country people, that they come now to him without further exhortations, either of the curate or of the phyſician. If that example, of which I have given as much publicly as I could, ſhould be followed by the brethren of the worthy curate of runnam, how many thouſands lives, ſo precious to the coun-By after a deſtructive war would be preſerved!

A young nobleman, Count Francon Hugues de Salm, diſtinguiſhes himſelf particularly by the encouragement which he gives to the Vaccine Inoculation at Brun, the capital of Moravia. He came on purpoſe to Vienna, to be acquainted by me of the beſt ſteps he had to take to introduce it. He examined ſome vaccine patients, to know what the vaccine puſtule ought to be. He has read all the Treatiſes he could collect on the ſubject. He has addreſſed an exhortation to the people of Moravia,

* We underſtand that this learned Phyſician is about to publiſh, in French and German, an elaborate Hiſtory of this Inoculation, dedicated to Lord Minto, as Miniſter of the nation where the diſcovery took place.

Moravia, to profit by your valuable diſcovery. He has offered two prizes for the two Moravian phyſicians who ſhall inoculate the greateſt number of children in the courſe of the year.* He has engaged intelligent phyſicians to aſſiſt in theſe inoculations in a place of Prince Salm, his father's houſe, devoted to that purpoſe: And, what is more curious, he has written a very good hiſtory of the Vaccine diſcovery, which he has diſtributed among all the curates and ſchoolmaſters of Bohemia and Moravia. Theſe aſſociations are under my direction; they ſend me their regiſters, have their vaccine matter from me, &c. — Such patriotiſm is truly praiſe-worthy, and reflects the greateſt honour upon the young nobleman who has conceived and erected ſo humane an inſtitution.

I have introduced the Vaccine Inoculation in the Venetian State, under the direction of a very intelligent phyſician, Doctor Moreſchi, who has begun it with the greateſt ſucceſs. I look upon Dr. M. to be perfectly well verſed in the new mode of inoculation, which I am at preſent far from conſidering as a ſubject to be committed to the hands of the inexperienced.

As Dr. Moreſchi has begun his inoculations at Venice with the children of people of the firſt rank, there is no doubt that their example will be followed very rapidly, and that Italy will ſoon enjoy the benefit of your diſcovery.

The German phyſicians are ſo perfectly convinced of the advantages of this inoculation, that they have printed a ſhort and popular exhortation to the people, which has been put into the hands of all clergymen, who are ordered to deliver a copy of it to the father and godfather of every child who is brought to church to be chriſtened.

But among the various progreſſes of the Cow-pox inoculation to which I have been inſtrumental on the continent, none ſeem to me more intereſting than its introduction at Conſtantinople, under the auſpices of Lord Elgin, the Engliſh Ambaſſador, who diſcharges by theſe means, in ſome reſpect, the debt which England and all Europe had contracted with the Turks for the inoculation of the Small-pox. His lordſhip had heard ſuch favourable accounts of the Cow-pox, that he introduced it at Conſtantinople by the inoculation of his own child, Lord Bruce.

[The above is a very conciſe Extract from a long letter, in which the eulogiums on Doctor JENNER, and the importance of his diſcovery, are omitted.]

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* Who has done this in England? The reward however of this diſcovery, we hope, is delayed only to be increaſed.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

HYSTEROTOMY, or the Ceſarean Section was performed upon a woman at Rochdale, about a month ago; the child was taken out alive, but is ſince dead; the mother ſurvived till the fifth day. Three caſes of this ſort have occurred in Lancaſhire within little more than two years, two at Mancheſter, and the one now announced at Rochdale. This is extremely ſingular; for, I believe, no ſuch inſtance is recorded as having happened in this country for many years before. In the firſt that is mentioned from Mancheſter, which is the caſe of Ann Lee, the woman was in a dying ſtate when ſhe underwent the operation, and a putrid fœtus was extracted; but as the ſtate of it could not be aſcertained before birth, and as the child might have been preſerved, nothing could add to the danger of the mother, the operation was unqueſtionably juſtifiable. In the ſecond, that of Elizabeth Thompſon, the ſection was made in leſs than twenty-four hours from the coming on of labour, and ſhe ſurvived it nearly ſeventy-ſix hours; the child lived about eighteen months. It is worthy of remark in Elizabeth Thompſon's caſe, that it appeared to the accoucheurs of the Lying-in Hoſpital at Mancheſter, where ſhe was operated upon, that ſhe did not die in conſequence of the operation, but of an injury done to the uterus by the preſſure of the child's head, which had taken place before the operation. It is indeed ſurpriſing that ſo little miſchief ſhould be occaſioned by extracting a child in this way; nevertheleſs, they are gentlemen of veracity, and, in their own neighbourhood, of the firſt eminence in their profeſſion. I am credibly informed, that ſhe was ſo well the day after the operation, as to ſit up in bed and ſmoke a pipe of tobacco. The woman at Rochdale was ſeen by Mr. White, of Mancheſter, ſoon after the operation; and at that time, as I am well informed, there was nothing in her ſituation that denoted danger till the dreſſings were removed from the external wound, which unfortunately appeared to be in a gangrenous ſtate, and this, moſt probably, was the immediate cauſe of death. If women can ſafely undergo this operation upon the continent of Europe ſix or ſeven different times, of which we are well aſſured, why ſhould practitioners be diſcouraged from employing it, by its failure in the few inſtances that have occurred in this country? The authority of Mr. White muſt have great weight in recommending the practice, and alſo much force in doing away

the fears of thoſe among us who had been deterred from practiſing it by an apprehenſion of danger.

I have taken the liberty to ſend you the above chiefly as an article of intelligence, which you will do me the honour of inſerting in the next Number of your uſeful Journal.

I am, &c.

Bolton le Moor, March 14, 1801. EDW. HARDMAN.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

LETTERS have been received from Dr. J. H. Marſhall, dated Malta, Dec. 18, 1800, in which he gives an account of his arriving at that place on the 1ſt of the ſame month, and commencing the practice of Vaccine Inoculation the next day, by inoculating ſeveral children in the Foundling Hoſpital, who were proceeding through the diſeaſe in the moſt favourable way.

Lord Keith and Sir Ralph Abercrombie have iſſued general orders for the inoculation of the ſoldiers and ſailors under their command. Dr. Marſhall adds, "In all our experience we have not obſerved a ſingle deviation from the uſual mild and gentle appearance of the Cow-pox in England; nor has a ſingle ſoldier or ſailor been prevented from doing his ordinary duty."

It is now, therefore, evident how little reaſon there was for the alarm excited with ſo much induſtry, that our brave tars were to be made the victims of experiment. Previous to receiving this intelligence from Dr. Marſhall, I received from my nephew, Mr. J. Ring, an equally favourable account of the good ſucceſs attending Cow-pock Inoculation at Chatham, which was communicated to him by the ſurgeon of the marine barracks.

This is the place to which all recruits are firſt ſent to be approved of by a general officer appointed by government, and where it is cuſtomary to inoculate thoſe who have not had the Small-pox as ſoon as they arrive, which has for ſome time been done with the Cow-pox.

The numbers wanted have been ſo great that the Cow-pock patients have not been entered on the ſick liſts, conſequently they were obliged to perform the ſame duty as the others; which

which they have hitherto done, without perceiving any inconvenience.

Since I wrote my former Obſervations on the cure of the Bronchocele, Mr. Pearſon informs me, that his experience in the treatment of the diſeaſe perfectly coincides with mine. He has frequently given large quantities of the ſpongia uſta in other forms, for a conſiderable time, to no purpoſe; and afterwards effected a cure by adminiſtering a ſmaller quantity in the form of a lozenge.—As a proof of the mild and innocent nature of this remedy, he has given ſome patients an ounce a day of that article without the leaſt injury.

I readily agree with Mr. Moore, that the caſe he deſcribes in your laſt, was of an inflammatory kind; but think it ought to be conſidered as a caſe of Phrenitis rather than Synocha. I beg leave to ſuggeſt, with due deference to the learned and ingenious author, that a ſtout man, of a *florid complexion*, and a *full ſanguine habit*, under the influence of *extreme terror*, with a *pain in his forehead*, *his face redder than uſual*, and *his eyes ſlightly inflamed*, with a *pulſe hard*, *ſtrong*, *and regular*, might poſſibly have borne the loſs of blood, on the ſixth day, or on *any day* of the diſeaſe, not only with ſafety, but even with advantage.

We are informed, that from the ſixth day, when Mr. M. firſt ſaw him, the diſeaſe increaſed, though with occaſional remiſſions, for four days. The ſkin was hot, the patient diſpoſed to conſtipation; thirſty; ſhewed no ſigns of nauſea, or want of appetite, but ſwallowed readily whatever was given him. On the tenth day he was quite furious, and could hardly be kept in bed, though ſtrapped down, and reſtrained in bed by two ſtrong men.

That Mr. M. ſaved the life of his patient by a rigid adherence to the antiphlogiſtic plan in every other reſpect, inſtead of treating the diſeaſe as a Typhus, and diſpatching his patient by the aſſiſtance of bark and wine, as is too much the faſhion, will, I preſume, be acknowledged by the moſt reſpectable part of the medical profeſſion.

From the well-known candour and liberality of the author of the paper here commented on, whom I have the honour to call my friend, I doubt not but he will excuſe the freedom of theſe remarks. I am, &c.

New Street, Hanover Square,
March 19, 1801.

JOHN RING.

The following complete and satisfactory Account of the Progress of the Vaccine Inoculation in France, we have translated from the Moniteur (official Paper) of the 11th Ventose, which we received on the 7th of March.

Letter addressed to the respective Mayors of the Twelve Districts of Paris.

CITIZEN MAYOR,

THE Medical Committee established at Paris by the Society of Subscribers for the diffusion of the Vaccine Inoculation, knowing your desire to promote the public good, have the honour of proposing to you, under the auspices of Citizen Præfect of the Department of the Seine, to concur with him in the establishment and propagation of this new method of inoculation.—

It was first discovered in England by Dr. Jenner, and immediately prosecuted with the greatest success by the English physicians, and afterwards by many physicians of Germany, Geneva, and every state in Europe; this method has been only known in France for about one year, through the exertions of Citizen Larochefoucault Liancourt. In the last spring, Citizen Liancourt published a statement, in which he announced, in consequence of the observations of the English physicians, that the Vaccine is a disease much milder than the inoculated Small-pox; that it is not contagious like that, and nevertheless an effectual preservative against the Small-pox.

This announce attracted universal attention; but the more it promised, the more important it became to be assured that it could accomplish what it promised; this certainty could only be attained by experiments. To arrive at it, Citizen Liancourt opened a subscription, the produce of which is to be applied to obtain the experience necessary, to ascertain in France the truth of these assertions. A great number of citizens eagerly subscribed: The subscribers met, and named a Committee of administration to regulate the expences. The funds arising from the subscription have been hitherto sufficient, and an audited account will be laid before the public.

The Society have also named a medical committee, for the purpose of carrying on the experiments. This committee has devoted itself to the trust confided to it, and laboured with the most constant activity from its establishment to the present moment. It has, at least, inoculated more than a thousand, without one sinister event; nay, not one of those inoculated has been confined to his room a single day.

The

The inoculated had conſtant intercourſe with thoſe not inoculated, even ſo intimate, as a mother, who had not had the Small-pox, ſuckling her child under the diſeaſe without the leaſt ſymptom of contagion. This point appeared ſo well eſtabliſhed, that the moſt violent oppoſers of the new method have not ſuggeſted the ſlighteſt doubt on this head.

In a word, the vaccinated have been inceſſantly expoſed to the contagion of Small-pox, even by ſleeping in the ſame bed, and eating and drinking out of the ſame veſſels, without any effect. More than ſeventy-two have been inoculated for the Small-pox, yet none have taken the infection.

The Committee has thus, by numerous experiments, verified the obſervations of the Engliſh phyſicians; and is convinced of the truth of the three principal ſtatements, viz.

1. The vaccine is a very ſlight diſeaſe.
2. It is not contagious.
3. It is an effectual preſervative againſt the Small-pox.

The Committee is preparing a Report, in which, as well as rendering an account of its own labour, it will demonſtrate theſe great truths, and eſtabliſh the public opinion with reſpect to the MOST BRILLIANT AND MOST IMPORTANT DISCOVERY OF THE EIGHTEENTH CENTURY, TO WHICH FRANCE, EUROPE, AND THE WHOLE WORLD WILL BE INDEBTED FOR THE ANNIHILATION OF THAT MOST DESTRUCTIVE SCOURGE, WHICH HAS RAVAGED AND DESOLATED IT FOR SO MANY CENTURIES.

While expecting this grand Report, which its importance has occaſioned to be delayed ſo long, the Committee has given a ſketch of it to Citizen Præfect, whoſe diſtinguiſhed ardour for the diffuſion of knowledge, the ſciences, and arts, and love for every thing intereſting to humanity, was well known to them.

They explained to him that more experiments were neceſſary to render the Vaccine Inoculation perfect; that it was neceſſary to inſtruct and form the inoculators who are ſtrangers to it; and that above all things, it was neceſſary to extend this practice among the people, in order to render it familiar and general, and in ſome degree to naturalize it throughout France, to the end that all might enjoy, and enjoy in the fulleſt extent, ſo great a benefit; that to attain ſo deſirable an end, the Committee muſt have an eſtabliſhment in the centre of Paris, where both practitioners, as well as the leaſt inſtructed and pooreſt of the people, whoſe time is ſo precious to them, might eaſily and conveniently acquire, the one inſtruction, and the other the neceſſary gratuitous aſſiſtance; that all may have it in their power, at their eaſe, and when they judged proper, to come and ſee, examine, clear up, aſſure themſelves, and finally determine

termine from the appearance of the inoculated, all doing well, and the explanations of the inoculators, who would make them perceive, and even feel in ſome degree the excellence of this method; that theſe were the only means by which inattention, careleſſneſs, indolence, ignorance, malevolence, and every kind of prejudice, which always ſet themſelves in oppoſition to new eſtabliſhments, could be vanquiſhed, particularly when the object is to render them popular.

The Citizen Præfect, who had the ſame views, haſtened to take ſuitable meaſures to form this uſeful eſtabliſhment, where the public, and above all, the indigent, might find the neceſſary ſuccours.

The Committee did not reſt here; their zeal for the comforts of the poor, and eſpecially for the extenſion of the art, made them deſirous that an emanation from this central eſtabliſhment might extend to all the twelve departments of Paris; and to you, Citizen Mayor, it belongs to promote this meaſure in your department.

The Committee propoſes to you to charge one of their members, whom they will appoint, to remove into a central part of your department, and to concert with you, with the members and the phyſicians and ſurgeons of the Committees of Benevolence, and all other phyſicians and ſurgeons whom you may judge proper to call in, on the moſt effectual means of perfecting and extending the Vaccine Inoculation.

Aſſiſtance will thus be found at hand by thoſe who want it, and who, conſequently, will become more numerous. The inoculators will be better inſtructed; and that which is eſſential both to the intereſts of humanity and the progreſs of the art, they will avoid the errors which are almoſt inevitable, when the Vaccine Inoculation is practiced without inſtruction and without experience. There is a ſpurious vaccine, which perſons unſkilled eaſily confound with the genuine. This ſpurious kind does not ſecure the patient from the Small-pox. What danger then may be incurred by thoſe who having only had this kind, and who believing themſelves by this operation ſecured from the Small-pox, expoſe themſelves to contagion without fear, and even with deſign? And if the Small-pox happen to ſupervene, the ignorant and malevolent never fail to attribute the event to the inefficacy of the *true Vaccine*; whereas they have only had a falſe one. For want of ſufficient inſtruction, and more particularly of experience, we have ourſelves been deceived. At the commencement of our labours, it happened to us to confound the falſe with the true; happily, the habit which we have of obſerving, and our extreme circumſpection, preſerved us from the dreadful conſquences which might have ariſen from this error. Can one conſtantly

ſtantly hope the ſame reſult from perſons leſs informed, leſs attentive, and above all, leſs exerciſed in the very difficult art of making experiments? May even our error then be profitable to others, and preſerve them from a ſimilar one. The progreſs of the art requires, the intereſts of humanity demand it.

Such, Citizen Mayor, are the motives of the propoſitions which the Committee have the honour of laying before you; in accepting it, you will accompliſh their wiſhes, and partake, Citizen Mayor, with the Præfect of the Department of the Seine, in the honour and the gratification of having concurred in preſerving our fellow-citizens from the dreadful ravages of the Small-pox. Health and reſpect.

Signed, on behalf of the Medical Committee,
GUILLOTIN.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

SINCE the Cow-pox became an object of general attention, the world has been greatly indebted to your Journal for the early promulgation of whatever has conduced to a more intimate knowledge of the diſeaſe. Though my ſituation as Houſe Surgeon to the Manchester Infirmary, affords me frequent opportunities of obſervation, yet I have hitherto refrained from ſending you communications on this ſubject, becauſe I wiſhed to compriſe the eſſence of many particular caſes within the compaſs of a few general remarks. Theſe I now tranſmit for your diſpoſal; they are either founded on caſes particularly noticed, or are the reſult of continued attention to the phænomena of this diſeaſe: The information reſpecting the Cow-pox has not only been very extenſive, but alſo contradictory; this renders it difficult either to recollect or diſcriminate the real and imaginary progreſs made in elucidating its nature. I truſt to be excuſed, therefore, ſhould I chance to repeat what has been already made public.

Although it may appear paradoxical, and even abſurd, yet I firmly believe, that the more general introduction of the Cow-pox has met with one obſtacle in its own mildneſs. Almoſt every patient in conſidering the ſubject of inoculation, forms ſome notions reſpecting it, which are often independent of, and frequently unſupported by the evidence of facts; thus biaſſed, he adopts or rejects on grounds equally fallacious, one diſeaſe in preference

preference to another. The abſence of eruption, and more particularly of fever, has been one cauſe to excite this undue prejudice, and proved with many a ſufficient motive for diſbelieving the anti-variolous power of the Cow-pox; ſeveral caſes have, however, occurred to me, which, independent of any concluſions drawn from its actual prevention of the Small-pox, clearly evince and beautifully illuſtrate its action on the ſyſtem at large. When children at the time of inoculation have any cutaneous eruption, I have always obſerved it increaſe conſiderably about the ſixth, ſeventh, or eighth day; after this period it is either greatly diminiſhed, or entirely diſappears. This evidently proves the affection of the Cow-pox to be general; and ſuch has been its ſalutary influence in ſome caſes, that in two or three inſtances I have been induced to try it as a remedy in a cutaneous diſeaſe; I have not, however ſucceeded, from my inability to infect the patients, who were all of them ſuſpected to have had the Small-pox.

Another inſtance ſimilar to the above, is ſeen when the infection has taken place more quickly in one arm than in the other; we here find the puſtule about the 7th day on one arm, making its uſual progreſs; while on the other, ſlight marks of inflammation are only beginning to appear: on the twelfth or thirteenth day, however, each arm has a puſtule nearly ſimilar.

From theſe facts, this concluſion (though already eſtabliſhed) may be fairly made, that in every inſtance of regular Cow-pox, a peculiar action is produced in the ſyſtem, though it cannot be always detected by a febrile paroxyſm.

In endeavouring to form an opinion of the ſuſceptibility of infection which different conſtitutions poſſeſs, I have made the following remarks: Perſons of delicate fibres, of ſmooth, lax, and clear ſkin; of flaxen hair and light eyes; ſuch, in ſhort, as are generally conſidered moſt obnoxious to ſcrofula, I have found leaſt ſuſceptible of the Vaccine Diſeaſe. On the other hand, children with dark ſparkling eyes, rough ſkin, and ſtrong muſcular fibre, are very readily infected, have oftener fever, and that more ſtrongly marked than thoſe above.

If this diſtinction proves well founded, it ought, perhaps, to influence our practice as to the depth or number of inciſions which we make in inoculating for this diſeaſe.

In patients of the firſt claſs I have obſerved the infectious matter remain ſo long inactive, that three weeks after inoculation I have from them communicated the diſeaſe to others. I may here remark, that no inconvenience has ever ariſen from the frequent uſe of matter taken at a late period, except this, (which indeed is ſufficient to prevent us uſing it) that in four

caſes

cases out of five I have failed in attempting to produce infection.

In patients of the second class, the acmè of disease, in two instances, have been preceded by convulsions; other causes than the Cow-pox, however, were present, to which they might be imputed.

When it has happened that the variolous supervened to the vaccine infection, the pustules of each, in the early stage of the disease, retained their distinct characters; but, towards the latter end of it, the vaccine assumed the variolous nature; at least the experiments of an ingenious friend, and the appearance of the pustule, incline me to believe so.

I have only one farther remark to offer. Children are frequently induced by the itching which ensues about the seventh day, to destroy the vaccine pustule; in this case are we to consider them as secure from the variolous infection, or not? I have made a practice of inoculating again repeatedly, but could seldom or never re-produce the disease. Some of your correspondents, probably, can give me information on this point.

Manchester Infirmary,
March 17, 1801.

I am, &c.
JOHN HUTCHINSON.

On the Chemical Analysis of Vegetables. By Dr. HERMBSTAEDT, *of Berlin.*

[Continued from Vol. III. pp. 373.]

On the Separation of sebaceous Matter from Vegetables.

THE sebaceous matter appears in vegetables in different forms, viz. as a fluid oil, as a substance of butyraceous consistence, and as a firm matter like tallow. As a part, mixed in them, it is so intimately united with gum, mucilaginous matter and water, that it cannot be easily discovered. But when those substances are reduced into small particles by comminution, and by continually stirring them, kept on a gentle fire till the water evaporates, the gum and mucilage hardens, and the sebaceous matter may then, in a pure state, be separated by a warm expression, and its weight also determined,* after having previously freed it from all adherent heterogeneous particles.

* As it is very difficult, if not impossible, to obtain all sebaceous matter by repeated expressions, this circumstance should be always attended to in determining its quantitive proportion in any substance that is to be chemically examined.

On the Separation of the aſtringent Principle from Vegetables.

All vegetables, in which the aſtringent principle has been hitherto acknowledged as a conſtituent part, poſſeſs, beſides their aſtringent effects upon the tongue, the property of tanning the freſh hides of animals, of decompoſing moſt of the metallic ſolutions, and principally of precipitating the iron from its ſolution in acids with black colour. Aſtringent principle, tanning principle, black colouring principle, are therefore terms that have hitherto been conſidered as ſynonymous, not only with one another, but alſo with the Gallic acid, which was firſt diſcovered by *Scheele*. — That the aſtringent and tanning principle, however, is only the ſame, and that it ought to be well diſtinguiſhed from Gallic acid, Mr. SEGUIN * has but lately evinced, by ſhowing that the tanning principle is precipitated from an infuſion of oak bark, by the addition of lime-water; whereas the Gallic acid is contained diſſolved in the remaining fluid. This fact Mr. PROUST † has ſtill more evidently proved, by making known the means of extracting the pure aſtringent principle ſeparate from the Gallic acid, and by ſhowing that this pure aſtringent principle is capable of changing in a ſhort time the animal gluten, and even the animal vegetable gluten into a coherent maſs, inſoluble in water, and reſiſting putrefaction: and it ought, therefore, on account of acting in the ſame manner upon animal ſkins, to be looked upon as the true tanning principle. (Tanin.) According to the ſame chemiſt, the method hitherto adopted for obtaining Gallic acid, by precipitating an infuſion of galls with a ſolution of ſugar of lead, is by no means the proper way, becauſe the Gallic acid and the aſtringent principle fall in this manner at the ſame time to the bottom of the veſſel with the calx of lead, which is not the caſe, when, inſtead of a ſolution of lead, a ſaturated tin in muriatic acid is employed, by which means the aſtringent matter combined with the calx of tin is precipitated as an inſoluble product, while the Gallic acid remains with another part of the calx diſſolved in the fluid.

This ingenious diſcovery leads us to quite a new way of exhibiting ſeparately the aſtringent principle, in the chemical analyſis of aſtringent vegetables.

For

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* Rapport au Comité de ſalut public, ſur les nouveaux moyens de tanner les cuirs propoſés par le Citoyen Armand Seguin. Journal des Arts et Manufactures, Paris. An quatrieme, T. ii. p. 66, and T. iii. p. 71, &c.

† Extrait d'un Memoire de Mr. Prouſt, ſur le principe tannant. Annales de Chemie, 25 tom. Paris 1798. p. 225, &c.

For effecting the separation of the astringent principle from any vegetable substance, this should be sufficiently boiled with water and alkohol; and after having mixed both decoctions, the alkohol is first distilled over, and the rest evaporated by a gentle fire, till the residuum becomes dry. This dry mass must again be extracted with alkohol, which leaves the gum untouched, dissolving only the saponaceous, resinous, and astringent principle. To this solution, a saturated solution of muriate of tin, after being diluted with water, is to be poured till it predominates, whereby a precipitation is occasioned. The remaining fluid contains free muriatic acid, muriate of tin, and gallate of tin, along with the other particles of the plant; and after having poured it off, it may be separately preserved; * but the precipitate is a combination of astringent principle with the calx of tin. In order to separate this combination, and to obtain the astringent principle in a pure state, a sufficient quantity of water impregnated with sulphurated hydrogen gas is to be added to the mass, after it has been diluted with distilled water. The sulphurated hydrogen, uniting with the calx of tin, precipitates it in the form of a blackish powder, whereas the astringent principle remains dissolved, and combined with the fluid. If this is slowly evaporated, the pure astringent principle is left in the form of a dry and brown substance, glossy when broken in two, whose weight may also be determined.

On the Separation of the colouring Principle from Vegetables.

Whether the colouring principle *(principium tingens)* in the vegetables is a principle of its own, or whether it rather originates in the mixture of different matters; and lastly, whether it does not even differ in its elementary mixture according to the difference of colour which it shows, are questions that I have not hitherto been able to ascertain, and several experiments made on purpose have still left me in doubt on this subject. What I have found by my own experience is, that in several vegetables, the colouring principle is involved with resin, in others with gum and saponaceous matter, and in others

* If the fluid which contains the Gallic acid is impregnated with sulphurated hydrogen gas, the tin falls to the bottom of the vessel, and the Gallic acid remains fluid, and mixed with muriatic acid and the other vegetable substances; and if these be not in too great a proportion, the Gallic acid may be separated in a crystalline form by a slow evaporation; but, on the contrary, if there is too great a quantity of those substances, it will be impossible to perform an accurate separation of it.

with mucilage and farinaceous matter. As this cannot be accurately determined, every ſubſtance in which the colouring principle is to be diſcovered, ought to be expoſed to ſeveral proceſſes, as follows:

1. Infuſe a plant with diſtilled water, and if the colouring principle be combined with gum or ſaponaceous matter, it will be contained in the infuſion, and adhere to a piece of linen, woollen, or ſilk cloth immerſed in it.

2. Infuſe any part of a plant with cauſtic ſpirit of Ammonia, and expoſe it to a gentle digeſtion. Should the colouring principle be blended with reſin, it will be diſſolved, and impart a colour to the fluid, and likewiſe to linen, woollen, or ſilk cloth, immerſed in it.

3. If the colouring principle be embodied in mucilage or farinaceous matter, as is the caſe in indigo and madder, a portion of the freſh plant ought to be pounded with water, and after having diluted it with more water, left to ferment; and from the colour of the ſcum generating on the ſurface, it may be concluded whether there is any principle preſent.

I have hitherto not been able to determine its proper quantitive proportion.

On the Separation of the cauſtic Principle from Vegetables.

The exiſtence of a cauſtic principle in vegetables can by no means be denied, but it ſufficiently diſcovers itſelf in horſeradiſh, in ſeveral ſpecies of creſſes, in garlick, by its pungent ſmell; and in the arum (wake robin root), and in ſeveral kinds of cabbage; farther, in Indian and black pepper, and many other vegetables, by its acrimonious taſte. However, I have been taught by numerous operations, inſtituted for that purpoſe, that it is ſcarcely poſſible, at leaſt by the experiments that have hitherto been made, to ſeparate it from other combinations, and to aſcertain its quantitive proportion in vegetables. This principle being volatile, it may be ſomewhat ſeparated in combination with water, by infuſing the plant in which it is contained, and expoſing it to diſtillation; but this is all that can be ſaid of it.

I have hitherto endeavoured in vain, by ſeveral experiments, to exhibit the narcotic and bitter principle of vegetables. The former, however, may at leaſt partly be ſeparated, by treating narcotic vegetables in a retort, without the addition of any fluid, at a temperature of 212° Fahrenheit; whereby a great part of n arcotic matter is obtained in a vapour, that goes over, and is thickened in the cool receiver; the greateſt part, however, remains in the retort. But it is by far leſs poſſible to repreſent

repreſent ſeparately the bitter principle (principium amarum) of vegetables, and both parts ſeem to be ſo intimately combined with gum, ſaponaceous matter, and reſin, that there is no hope of ever effecting a proper ſeparation of them, and aſcertaining their quantitive proportion.

With reſpect to the four or acid ſalts, as well as to the perfect and imperfect neutral ſalts and ſalia media, it is to be obſerved, that they are generally contained in vegetables in ſuch a ſmall quantity, and at the ſame time ſo intimately united with other component parts, and even intermingled with one another, that it is ſcarcely practicable to ſeparate them entirely from each other, and to determine their quantitive proportion accurately. All, therefore, that I can ſay in the following paragraphs about the ſeparation of thoſe ſubſtances, relates only to the manner of proceeding in general, and I cannot be anſwerable for the reſults being always accurate and correct in every ſmall inſtance.

On the Separation of Tartarous Acid from Vegetables.

When upon a previous trial with any vegetable ſubſtance, the preſence of a free acid is diſcovered in it, it is adviſable to take the freſh plant for determining and extracting from it the four principle. Any quantity of it is therefore bruiſed in a ſtone mortar, and the juice expreſſed. The reſiduum, after being infuſed, and ſtirred up with diſtilled water, is again expreſſed, which operation muſt be repeated till no free acid is diſcovered in it by re-agency. All the juice thus obtained is afterwards boiled up in a tin kettle, or in a glaſs veſſel, being mixed with the white of eggs, till it is clarified, and its impurities ſcummed off. The whole, after having become cool, is filtrated through blotting paper. The clear acidulous juice is then ſeethed again, and in continually ſtirring it, finely powdered oyſter-ſhells added, till no effervescence enſues. — The precipitate, which is hereby cauſed, is to be ſeparated, after having been ſuffered to depoſite quietly, by cautiouſly pouring off the fluid. For ſeparating from this precipitate the adherent heterogeneous particles, it ought to be repeatedly edulcorated with diſtilled water. It is then dryed, and put into eight parts of diſtilled water, to which is to be added a quantity of concentrated ſulphuric acid, equal to half the weight of the precipitate. This mixture being well ſtirred, is digeſted for 12 hours, after which time the whole is filtrated, and the reſiduum well waſhed out with diſtilled water. All the liquor thus obtained, is evaporated by a gentle heat, and by degrees

degrees cryſtallized *. The cryſtalline ſalt is the tartarous acid.

On the Separation of the Oxalic Acid.

When a previous examination of a plant diſcovers in it oxalic acid, its juice is after the above mentioned manner to be treated and clarified. The clear liquor is then poured into a diluted ſolution of muriated barytes, by which means the oxalic acid uniting itſelf with the barytes, will fall to the bottom, and the tartarous and malic acid remain. From this precipitate, after it has been carefully waſhed, the oxalic acid may be ſeparated by ſulphur, and exhibited by cryſtallization.

On the Separation of the Malic Acid.

By treating any vegetable juice that contains malic acid in the above manner, the malic acid remains diſſolved and combined with the calcareous earth. In order to ſeparate it, a ſolution of ſugar of lead with diſtilled water ſhould be dropped into that liquor, till no further precipitation is produced. The malic acid falls in this manner to the bottom along with the ſugar of lead, whereas the acetous acid remains combined with the calcareous earth in a diſſolved ſtate. The precipitate being infuſed with diluted ſulphuric acid is committed to a digeſtion, by which means the calx of lead unites with the ſulphuric acid, and the malic acid remains combined with watery particles, from which it may be ſeparated by evaporation.

On the Separation of the Benzoic Acid.

Benzoic acid has been hitherto found in no other vegetable ſubſtance, except reſins and balſams, from which it may be obtained in two different ways.

1. Expoſe any of theſe ſubſtances to a dry diſtillation, whereby the Benzoic acid will partly cryſtallize in the neck of the retort, and partly go over into the receiver with the other particles. For ſeparating it, the neck of the retort is waſhed out with warm water, which is then poured to the reſt that has been diſtilled over; and after having added eight times as much water as what the whole fluid amounts to, it is heated till the

* Should the plant contain at the ſame time oxalic and malic acid, the latter remains diſſolved in the liquor with the calcareous earth at the firſt ſaturation; but the former with the gypſum, as it cannot be ſeparated from the calcareous earth by ſulphuric acid. If there be, however, citric acid preſent in the plant, it remains combined with the tartarous acid, from which it is ſcarcely to be ſeparated.

the water begins to ſeeth. The hot water receives the Benzoic acid, leaving the oily particles untouched. The whole is ſeparated by a ſeparating funnel, and the watery fluid ſlowly evaporated, till the Benzoic acid begins to cryſtallize.

2. A portion of the ſubſtance that is to be examined is boiled for half an hour with a fourth part of quick lime and ſixteen parts of water. The Benzoic acid combines itſelf in this way with the calcareous earth, and diſſolves in the water. The liquor being filtrated, is mixed with muriatic acid, till this begins to predominate; by which means the Benzoic acid ſeparates in ſmall cryſtals as it cools. The reſt of the fluid, when evaporated, affords ſtill more of the acid.

On the Separation of the Saccholactic Acid.

The ſaccholactic acid has not been hitherto determined to be a component part in vegetables, but the gummy and mucilaginous matters always yield it when they are boiled with nitrous acid. Whether, therefore, it is really a component part of thoſe ſubſtances, or whether it is firſt compoſed during the operation from them and the oxygen of the nitrous acid, has not yet been ſufficiently aſcertained. This acid may be obtained from thoſe ſubſtances, by boiling for five minutes one part of them with eight parts of nitrous acid, (conſiſting of one part of ſpiritus nitrifumans and one part and a half of water). After the reſiduum becomes cool, the ſaccholactic ſeparates in form of an acidulated difficultly ſoluble powder.

On the Separation of Tartar and Salt of Sorrel.

When an eſſential ſour ſalt, either tartar or ſalt of ſorrel, or both mixed together, is traced in any plant, the ſeparation ſucceeds beſt in the following manner.

1. A certain quantity of the freſh plant is expreſſed, and the juice clarified after the above method. This juice being thickened to the conſiſtency of a ſyrup, is infuſed with ſix parts of rectified ſpirit of wine, and digeſted; whereby, if any of thoſe exiſted in the plants, it is found cryſtallized after the fluid becomes cool.

2. The cryſtallized ſalt ſhould then be ſeparated from the fluid, and by being repeatedly diſſolved in diſtilled water, diſengaged from any adherent heterogeneous particle.

3. The form of the cryſtals ſhows whether it is pure tartar or pure ſalt of ſorrel; but if both are mixed with each other, this may be diſcovered in the following manner: Put a little into a ſilver ſpoon, and hold it over hot coals. Should the maſs then emit during the melting, vapours ſmelling like burned

burned ſugar, without forming a ſublimate, on a glaſs plate held over it, it is pure tartar; but if white vapours riſe on a glaſs plate to a white and four powder, this is the oxalic acid, which ſhows the mixture of ſalt contained to be ſalt of ſorrel. *

On the Separation of Saltpetre from Vegetables.

When a plant contains ſaltpetre, this is eaſily diſcovered by burning the dry plant in a candle; whereby, if but little ſaltpetre exiſts in it, a weak detonation is remarked. Being in this manner convinced of the preſence of ſaltpetre, bruiſe a certain quantity of the freſh plant, and expreſs the juice, which having been clarified according to the above method, and thickened to the conſiſtency of a ſyrup, is alſo treated with rectified ſpirit of wine, whereby the ſaltpetre is obtained in a cryſtalline form, after the ſpirituous digeſtion being cooled.

[To be continued.]

* When the vegetable acids are perfectly neutralized in plants with alkalies or earths, and principally when theſe combinations are eaſily ſoluble, they are ſo intimately combined with ſaponaceous matter, that a ſeparation is in vain expected, and one muſt be contented with only knowing their exiſtence in vegetables. The neutralization with ammonia is recognized, by adding quick-lime, from the volatile ſmell, and the white vapours that riſe, when a piece of wood, moiſtened with concentrated acetic acid, is held over it. A ſeparation of the ammoniacal neutral ſalts is likewiſe not obtainable, even if the neutralization be effected by mineral acids.

CRITICAL

CRITICAL RETROSPECT

OF

MEDICAL AND PHYSICAL LITERATURE.

[FOREIGN AND DOMESTIC.]

Elementarlehre; i. e. Elementary Doctrine of Organic Nature, by Dr. F. J. Schelver, Vol. I. Organomy, 1800, pp. 103, in 8vo. *Gottingen, Dieterich.*

It is very conſoling to the rational phyſician, to contemplate the active ſpirit and the vigorous efforts of the preſent age, in order to penetrate into the myſtery of the final cauſe of organic phenomena, to point out the conſtant laws which rule their eternal viciſſitude, and by that means to eſtabliſh a higher degree of certitude and ſolidity in the medical art than it has hitherto enjoyed. Every contribution tending to that purpoſe, ought to be thankfully received, and every idea duly regarded, by which we may hope to advance in the intricate knowledge of our organization. The ingenious author of this publication has endeavoured to contribute his ſhare towards its attainment, and by applying the principles of philoſophy, to throw new light upon the elements of phyſiology; in which attempt we readily grant, he has not been unſucceſsful, and has not only ſhown a great deal of acuteneſs and penetration, but alſo brought forth ſeveral intereſting ideas, which, if farther proſecuted, are likely to bring us nearer to truth, and to improve our knowledge of organic nature. After having ſhortly explained in *the introduction*, the purpoſe of his work, the author divides the firſt part of it, or the *organomy*, in which the general as well as particular laws of organic nature are inveſtigated, in the ſubſequent ſections. 1. *On the niſus formativus of nature.* Here the author expounds the idea of *matter*, according to Kant's principles, by adopting only two fundamental powers, the *attractive* and *repulſive*, from which the exiſtence of *matter* is deduced. 2. *On the ideas of organic and inorganic nature.* The author here very juſtly draws the following concluſion: "Inorganic is quite a relative idea, and nature is an organic whole." 3. *Difference of life and organization*, in which however he ſeems not to diſtinguiſh accurately enough, as it would be proper previouſly to fix the notion of life before that difference ſhould be ſtated. 4. *On vis vitalis.* The definition which he gives of vis vitalis, appears to be very plauſible. "Life, he ſays, is the combination of proportionate powers, which by their reciprocal action, produce the phenomena which we call life." 5. *The living organic body more cloſely contemplated.* This is a recapitulation of his former ſtatements, and an account of the laws of the vis vitalis. 6.

Difference between Animals and Vegetables. After having examined the different definitions, by which the naturalists attempted to constitute the difference between the animal and vegetable creation, the author adopts the opinion of Prof. FICHTE, who thus states it. "Plants are formed and nourished by raw matter, whereas the animals receive their nourishment from the regnum organisatum." 7. *On the difference between man and animal.* This section is merely metaphysical, and the result of it is, "In men there is an organization for *freedom*; in the other organic bodies, there is an organization for *instinct*." 8. *Elements of the physiology of the living bodies.* The author divides the whole system of physiology into the vegetable, animal, and human nature, viz. 1. ORGANIZATION FOR THE INSTINCT, a, *nutrition by inorganic matter* (plant) b; *nutrition by organic matter*, (animal.) 1. ORGANIZATION FOR FREEDOM, (man.) 9. *On the scope of nature;* very metaphysical. 10. *On the scope of living bodies;* where he says, that all shall reciprocally nourish, preserve, and form themselves. 11. *Deduction of the organic body;* a recapitulation of all its different laws and conditions: This section is written with particular acuteness.

Olai Swartz, dispositio systematica muscorum frondosorum Sueciæ. Adjectis descriptionibus et iconibus novarum specierum. Erlangæ, apud J. J. Palm. 1799. p. 112 in 8vo. minor. Tabb. Cen. IX.

THIS publication ought to be a very acceptable present to the connoisseurs and lovers of the finer Botany, as it exhibits a description of the numerous mosses of Sweden, a country so rich in cryptogamical plants, and is at the same time composed by a botanist, who is known to be particularly conversant in the difficult tribe of mosses. This part of the Swedish Flora has received considerable improvements, from the assiduity of Prof. SWARTZ, since LINNÆUS's time, as of the two-hundred and three species which are here enumerated, ninety-eight were unknown to LINNÆUS. We have however much reason to suppose, from the extent of that kingdom, and its variety of soil, that there may be still several species, which escaped the notice of our author, viz. *Orthotricum Offine*, *Grimmia Cribrosa*, *&c.* In the arrangement of the genera, he follows the method of HEDWIG, according to the alterations and improvements that it has undergone by Dr. SCHREBER, from whom however he differs in some respects; though this seems not always to merit the approbation of botanists. Each species is well characterised, a few inaccuracies and mistakes excepted; and with respect to the synonymous terms, he has mostly confined himself to DILLENIUS, LINNAEUS, and HEDWIG. Several trivial names are altered, because they gave rise to confusion and mistakes, and several doubts are removed, to which some species of LINNAEUS and DICKSON were exposed. The external neatness and elegance of the book keep pace with its internal value. The plates are well executed and neatly coloured, representing mostly new species, as *Grimmia alpicola*, *Didymodon cernuum*, *Di-*

cranum

granum Schreberi, Orthotrichum obtusifolium et pumilum, Polytrichum, longisetum, Arcticum, &c. We regret that from the plan of our Journal we cannot give a fuller account of this work, adequate to its merits, however, we hope that it will come into the hands of every botanist who studies the cryptogamical plants.

Europens Vorzugliche Bedurfnisse; i. e. The principal Necessaries of Europe from Foreign Countries, Botanically and Chemically examined and considered with respect to their Dietetic and Medical Use; by Dr. C. W. Juch, &c. No. I. *Coffee and its Substitutes.* 1800; pp. 720, in 8vo. Nurnberg.

Dr. Juch, whose name is already known to our readers, proposes in this publication to examine scientifically the different productions that are imported from foreign countries, and the use of which has become at the same time universal and necessary through all Europe, from the highest ranks to the lowest class of people, as *coffee, tea, &c.* and likewise to investigate their medical and dietetical qualities, and how far the different substitutes answer their purpose. The present number is devoted to coffee and its substitutes, a beverage particularly familiar upon the continent. After having premised the botanical description, the author proceeds to give a chemical analysis of coffee and its substitutes, according to his own experiments. He analysed the coffee of Martinique, and found by distillation, and the preparation of the watery extract, and treating the residuum with spiritus vini, in 300 grains, 80 grains of extractive matter, (in which, neither tanin nor an acid could be traced); in 200 grains of the residuum, 18 ½ grains of a pure bitter resin; 20 grains of the last residuum, when treated with nitrous acid, yielded a substance like wax, that did not suffer any change by repeated edulcorations; with potash a saponaceous mixture was obtained. (Here the author remarks, that common wax is composed by the carbon and hydrogen of the pollen of flowers, the azote of the bee, and the oxygen of the atmosphere.) At the burning or roasting of the coffee beans, carbon is disengaged, and by uniting with hydrogen forms an oily substance, with which the resinous particles combine themselves. The oxygen of the atmosphere seems also to be active, as by roasting the coffee too much, acetous acid is evolved. The goodness of the coffee depends on the proportion of the quantity of resin to the extractive matter, on which account bad coffee may be improved by pouring hot water upon the beans, over which it is suffered to stand for some time, which process deprives them of a part of extractive matter. 1000 grains of succory root, *(Cichorium Intybus, Lin.)* a substitute that is most generally in use, yielded 250 grains of a very bitter watery extract, and 30 grains of resinous extract. The root of *Scorzonera Italica, L.* another substitute for coffee, afforded of 100 parts, 0,32 water, 0,10 sweetish watery extract, 0,09 farinaceous matter, 0,03 resin, 0,46 fibrous substance. The beet root contained 0,47 water,

0,13 sweet watery extract, 0,07 sugar, 0,04 albumen, 0,04 sal ammoniac. This root affords the best substitute. After having previously extracted the saccharine particles, it ought to be carefully dried, and gently roasted. The medical virtues of coffee are, according to the author, excitant; and he denies that coffee relaxes the fibre, as is by some supposed. He also states how far the use of coffee is wholesome or unwholesome, according to age, constitution, climate, &c. He recommends us to drink it one or two hours after the meal, or, which is still better, one hour before it. It agrees better with persons of less irritability than with others, &c. As a remedy, it proves of service in scrophula, hypochondriasis, asthma, diarrhœas, agues, against narcotic poisons, &c. The salubrity of the substitutes seems to depend upon the similarity of their constituent particles with the true coffee, and on the mode of preparation. The beet root deserves to be preferred to all other substitutes; however, none of them is able to replace the genuine coffee, which is always more agreeable to the taste. These are the contents of the first number of this useful publication, and its continuation seems very desirable.

Filicum Genera et Species Recentiori Methodo Accomodatae, Analytice Descriptæ, a JOANNE HEDWIG, M. D. ac Professore Botanices in Studio Literario Lipsiensi, &c. Iconibus ad Naturam Pictis Illustratae a Romano, Adolpho, Filio, Phil. et M. D. 1799. Lipsiæ. Six plates, and five sheets and a half. Price 12s.

THIS is the last production from the pen of that great botanist, the late Mr. Hedwig; but the first Fasciculus we have before us, makes us wish that it may be continued after the author's death. After having made some remarks on the terms used in the description of ferns, on their generic character according to the parts of fructification, the author proceeds to fix the character of the genus *Trichomanes*, to which the present fasciculus is devoted. Dr. Smith had separated this genus into two different genera, viz. *Trichomanes* and *Hymenophyllum*, which however Dr. Hedwig thinks not necessary; and besides, as the character of both genera established by Doctor Smith, appears to him not sufficiently clear and distinct, he unites them again under *Trichomanes* for preventing confusion. The description of the single species is done with much accuracy, and the necessary synonyms are added, together with the place of growth, and the explanation of the plates. The species described and figured in this Fasciculus, are *Trichomanes crinitum* from Jamaica, *Tr. pyxidiferum*, *L. Tr. hymenoides*, a new species, *Tr. pinnatum*, likewise; *Tr. crispum*, Plum. *Tr. scandens*, *L. Tr. lucens*, *Sw.* from Jamaica; *Tr. pusillum*, *Sw. Tr. rigidum*, *Sw. Tr. tenellum*, *Sw. Tr. reptans*. The plants are represented in their natural size, and also magnified; the single parts of fructification are particularly figured with accuracy and elegance.

Asclepiades,

Asclepiades; i. e. Aſclepiades and John Brown, a Parallel by Dr. K. F. Burdach. 1800. Leipſic, Meiſner, 8vo.

The hiſtory of Aſclepiades the Bythinian, has been but lately ſucceſsfully treated. Aſclepiades was at the head of the methodic ſect, and his name obtained a very high celebrity, equal to that which Brown begins to enjoy as the author of a ſyſtem of medicine, that meets with ſo much applauſe, particularly on the Continent. It is therefore not an unlucky idea of Dr. Burdach, to draw a parallel between theſe two men and their reſpective doctrines, which have occaſioned ſuch a revolution in the medical ſcience; and the manner in which he has acquitted himſelf of this taſk, renders his book very agreeable to read. He commences with repreſenting their individual qualities, ſituation, character, and ſcientific knowledge, and explains the circumſtances that gave riſe to both their ſyſtems, of which he gives the elements. The whole is concluded with obſervations on both ſyſtems.

A System of Diſſections, explaining the Anatomy of the Human Body, the Manner of displaying the Parts, and their Varieties in Diſeaſe. Vol. I. containing the Diſſections of the Abdomen, Thorax, Pelvis, Thigh, and Leg; by Charles Bell, Fellow of the Royal College of Surgeons. Folio, in five numbers, 5s. 6d. each. Johnſon, London.

We have delayed our obſervations on this very uſeful work, and excellent guide to the ſtudent of Anatomy and Surgery, till the completion of the firſt part of the author's deſign.

This volume comprehends the diſſection of the abdominal muſcles and viſcera, with the effects of diſeaſe on theſe parts; the anatomy and diſeaſes of the contents of the thorax; diſeaſes of peritoneum; ſection of the pelvis; points of ſurgery illuſtrated by the ſection of the pelvis; contents of the pelvis as ſeen from behind, and plan of the arteries; the deſcent of the teſticle; hernia and hydrocele; diſſection of the faſcia, ſuperficial parts on the fore part of the thigh; diſeaſes of the cutaneous veins, lymphatics and faſcia; ligament of the thigh and femoral artery in the groin; tumors in the groin; popliteal aneuriſm; and diſſections of the back part of the thigh, and of the leg and foot.

The drawings from which the engravings are taken, are highly creditable to the author's ingenuity, and furniſh the ſtudent with a fair example of the utility, we had almoſt ſaid the abſolute neceſſity, of the art of deſigning, for thoſe who wiſh to become good anatomiſts and operators.

The author gives ſeveral uſeful directions on the mode of making anatomical preparations by injection, which we ſelect for the gratification of thoſe who have not opportunities of conſulting the original.

"To thoſe who are commencing their operations, ſmall ſubjects will be found the moſt convenient, being more eaſily managed, and not likely to embarraſs the ſtudent with much confuſion. Beſides, his views at firſt ſhould not be ſo immediately directed

directed to practice; his object ſhould rather be to acquire general ideas of the anatomy. Young ſubjects are likewiſe much fitter for injection (I mean for the injection of the arteries, and for minute injection): they are not only more eaſily heated and managed, but, what is of more conſequence, their blood-veſſels have an elaſticity and ſtrength which enables them to bear the puſh of the injection better, and, by a kind of elaſtic reſiſtance, to give warning of the danger of rupturing their coats; while, in old bodies, the piſton of the ſyringe goes eaſily down ſo far, ſtops, and, if forced, moſt probably burſts the veſſels, driving the injection amongſt the muſcles, and giving much trouble in the diſſection. When any of the trunks burſt in this way, the tenſion being taken off, their coats contract upon the warm injection, and they remain half filled.

" In old age, this want of pliancy becomes very remarkable. There is often a kind of ſtiffneſs and rigidity, as if the coats of the veſſels were corrugated; a degree of that ſtate in which we find the arteries when oſſified, or when concretions are formed in their coats.

" If only ſome coarſe injection is in a ſlovenly manner to be thrown into the great veſſels to ſhow their courſe, it does not much ſignify how it is done, or what injection is uſed, or what means are employed to facilitate the paſſage of the injection. But if the veſſels are to be injected minutely, it is neceſſary previouſly to heat the ſubject well, by bathing it in warm water, or applying ſteam to the ſurface. This is of more conſequence than even the choice of the ſubject; for, as the injection is intended to be pentrating and fluid when warm, and, upon becoming cold, to congeal and remain ſolid in the veſſels, it is neceſſary that the veſſels be heated, that they may not ſuddenly chill the injection: beſides, this heating of the body ſoftens and relaxes all the maſs of fleſh, and brings it to a more ſuitable ſtate for admitting injection. But it ought to be remembered, that, if the parts be overheated, eſpecially where the veſſels to be injected lie expoſed, there is danger of ſpoiling all, by corrugating their coats, and making them quite friable and tender. There is a better way ſtill of heating the ſubject; viz. by heating the veſſels themſelves; and, indeed, the two methods ſhould be always combined.—The common practice in the injection of the great veſſels, is, to inject firſt equal parts of brown and white ſpirit varniſh, coloured with the ſame paint that is uſed for the coarſe or wax injection; and this fine varniſh injection, being moderately heated, and thrown in before the wax injection, clears its way, and moderately heats the veſſels, ſo that they do not readily cool or retard the wax injection which is to follow. But when uſing minute injection (which is ſize coloured with vermilion) for the purpoſe of demonſtrating the minute veſſels, although the hard injection is thrown into the veſſels after it, ſimply to ſtop the regurgitation of the warm and liquid ſize, and to retain it in the minuteſt extremities of the veſſels, yet it infallibly happens that the wax injection runs

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more minutely in this way than in any other. This being the case, it will be found, in all cases, to be a better method to use painter's size, coloured with vermilion, and heated, but not so much as to crisp the vessels; and to throw it in before the coarse injection. It is the least expensive, runs more minutely, gives always a chance for beautiful specimens of minute injection, and can be pushed to any quantity, even till the skin of the limb becomes quite tense, without rupturing the vessels, or those vessels at least by which the coarse injection can escape. By this means, the vessels are dilated, the limb made warm and moist, and the wax injection flows easily into the arteries, whilst the size escapes with the slightest pressure into the cellular texture.

"There are still other things which require attention; viz. the tying of all collateral vessels that may have been opened, and the fixing of the tube securely in the mouth of the vessel. When the injecting pipe is introduced into the vessel, it cannot be retained there by a simple knot, without a chance of its slipping off during the injection, or, if tied firmly, of cutting the coats of the vessel. Therefore, after the ligature is drawn upon the artery including the tube, the ends of the ligature should be brought over the wings of the tube, and then carried round so as to include that part of the ligature which reaches from the mouth of the tube to the wing; and being tied there, the former knot is tightened, and the mouth of the artery drawn up upon the barrel of the tube.

"The coarse injection is composed of the following ingredients: Bees wax, six ounces; resin, eight ounces; turpentine varnish, six ounces. The wax and resin give hardness and consistency; and the varnish is added to give it pliancy. These colours are generally used: Vermillion, king's yellow, flake white, smalt, verditer, verdigrise, lamp black. They should be mixed with the turpentine varnish, and then added to the wax when melted; and should there be occasion to melt the injection a second time, the heat must be cautiously applied, lest the colours should be burnt and destroyed. The injection should not be thrown into the vessels while too warm, for it will hurt their coats. The degree of heat should be such, that the finger can be allowed to remain in it for a little while.—A coarser composition may be made with tallow, wax, spirit of turpentine, and oil, coloured with the coarser paints; or, simply, tallow and red lead, when the parts are not to be preserved. And for minute injection, turpentine, coloured with vermilion, (which Haller preferred to all other injections, for running minutely, and without extravasation); painter's size, coloured with any of the above paints; or equal parts of brown and white spirit varnish.

"When delicate membranes are to be injected either with quicksilver or with fine size, instead of tying all the vessels by which the fluid may escape, I have found it necessary only to sear the edges of the membrane with a heated iron; or, after having fixed the tubes, the common method is to dry the edges all round, while the middle part is kept soft and moist. When it is required

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to demonstrate the vascularity of a part where there is no opportunity of injecting it, if membranous, the blood may be detained in the vessels by quickly drying and varnishing it. The blood, when extravasated, or when (as in the piles) preternaturally collected in vessels, may be coagulated by a solution of alum; or blood inflamed parts may be coagulated by distilled vinegar. In other instances, as in preparations of the lacteals, their natural fluids may be coagulated and preserved by plunging them suddenly into strong spirits.

"There are many parts of the body which it is impossible to keep for any time in their original beauty, and these the most delicate and interesting; as the organs of the senses, and all minute nervous parts, the villi of the intestines, the comparative anatomy of insects, the incubated egg, &c. The ready demonstration of such delicate parts in the fresh subject is the truest test of the abilities of the practical anatomist; for there is more delicacy and nicety required in exposing these parts, and more real benefit to be derived from them, than in making the more lasting preparations.—The minute structure of many of these parts must be dissected and unravelled under water, where the loose and floating membranes display themselves; while, out of the water, they would lie collapsed and undistinguished. In such investigations, I have found nothing of so much service as jelly made strong and quite transparent. When a delicate part is completely dissected (suppose it to be the coats of the eye,) place it in the jelly as it is becoming firm, and hold out the parts; and they will be retained, elegantly displayed, either for demonstration or for drawing."

The following observation is well worth the attention of students.

"From what I have seen of private dissection, I would rather advise those who are desirous of undertaking a complete course of dissections, not to begin their labours with learning all the muscles of the body; for this, besides other disagreeable circumstances, is a dry and tedious task at first.—It will perhaps be found more truly useful to begin their dissections with general views to the economy of such parts as, from lectures or books, they know to be of importance; then proceeding, in a more determined way, to study rigidly the anatomy of the bones and muscles, and accidents of the great joints,—the blood-vessels and nerves, and the anatomy of the great operations of surgery.

"During dissection, there are many little operations which should be practised, and which are neglected. The introducing, for example, of probes into the ducts; as into the nasal duct, and into the ducts of the salivary glands; the introducing of instruments into the nose and throat, and into the Eustachian tube: the use of the probang, and of the catheter, &c.—Knowledge and dexterity in such points often prove more useful, as being oftener required, than the greater operations of surgery."

[To be continued.]

Asthenology.

Asthenology, or the Art of preserving feeble Life, and of supporting the Constitution under the Influence of incurable Diseases. By C. A. Struve, M. D. Translated from the German, by W. Johnston, 8vo. pp. 431, price 8s. London. Murray and Highley.

On the interesting subject of this work, the Author seems to have exhausted every source of information, and to have suffered nothing connected with his subject to escape him. On the importance of Asthenology, especially at this time, the author in the introduction says, "Those acquainted with the value of human life, know the importance of a year, a day, and even an hour; and these when spent amidst the full enjoyment of the vital functions, of how much importance to our whole existence! What events, fertile in consequences, depend often on one hour of our life! It is, therefore, an eternal and irreparable loss, when not enjoyed as it ought. On the bed of death, an hour often determines the fate of whole families and states. How many sick die in greater peace, because, by having lived an hour longer, they accomplished one of their most ardent wishes. With what anxiety do many dying fathers wish for such an hour, because they expect the arrival of an absent son. How grateful is this hour to surviving friends, who have received from a dying man information respecting some important event of his life. Is any thing farther necessary to give importance to the art of prolonging feeble life?

"In the present period, when the number of asthenic diseases is so considerable, this art must recommend itself; and indeed, never was it so necessary both for the physician and the patient. This is the case in particular, among physicians of the first class, who have to struggle against artificial as well as natural debilities. It too often happens that asthenia exists to such a degree among enervated people, weakened by their mode of life, that no hope is left of restoring their lost health, much less of converting their increasing infirmities into rustic health and strength; and that the highest triumph which the medical art can obtain, is to assist the gouty voluptuary, or the nervous lady of fashion, to hold out for a couple of years longer; especially when he has to counteract or overcome incessant irregularities and debilitating habits, which his patients will not abandon. How many physicians, by their situation, are obliged to acquire experience in this great art, and yet are blamed because the artificial life which they procure to their exhausted patients, for a number of years, comes at length to an end."

This volume is divided into two parts; the first is intitled *Asthenogeny*, in which the nature of the vital principle, animal organization, the symptoms or phænomena of feeble life, and asthenic diseases, together with their causes, are minutely explained.

In his concluding observations on the vital principle, Dr. S. observes, "The vital principle may exist in an organized body in very different degrees. This difference depends on the organiza-

tion of the body itſelf; according as it is more or leſs ſuſceptible of the vital principle.

" This difference of ſuſceptibility is obſerved,

" 1. In the nature and conſtruction of different bodies; thus there is more vital principle in plants than in animals.

" 2. In the particular vital ſuſceptibility of organized bodies of the ſame genus; thus ſome men have a much greater quantity of the vital principle than others.

" This ſuſceptibility of the vital principle is,

" 1. ORIGINAL: innate as it were; *fortes creantur fortibus.*

" 2. ACCIDENTAL; it is deſtroyed by diſeaſes which effect a derangement of the organization.

" A total loſs and deprivation of the vital principle, and a commencement of the free action of the chemical powers in the body, is death.

" Death enſues:

" 1. In conſequence of the organization being deſtroyed, by which means it is rendered incapable of being acted upon by the vital principle. This is effected,

" By the force of external powers and violent impreſſions:

" By the gradual decay of vital ſuſceptibility in the organization in the courſe of time: death in old age, when the organs become inſenſible to external ſtimulants; when their ſuſceptibility of irritation even is blunted, by which the progreſs of the bodily functions is rendered ſluggiſh and ſlower, ſo that they can be excited only by uncommon ſtimulants, till the machine at length ſtops:

" By the long continuance of very violent excitement, or an immoderate activity of the vital principle, which produces weakneſs and death; an irregular life, uninterrrupted mental irritation.

" 2. Or by the loſs of the vital principle itſelf, even when the organization is in a perfect condition, in which caſe the vital organs alone ſuffer.

" Death enſues either SUDDENLY, when the body is at once exhauſted of the vital principle; or SLOWLY, which is common natural death.

" Except in theſe ſudden caſes, the tranſition from life to death takes place ſlowly; and the vital principle always lingers in the chief organs, even when it has been withdrawn from all the external parts of the body. In the moſt common kind of death, the tranſition takes place by means of apparent death, or apparent external death.

" We ought never to conclude that real death has taken place, until the operation of the chemical powers has begun to produce decompoſition and putridity. It is on theſe alone that we can eſtabliſh any certain ſigns for aſcertaining real death, and not on deficient individual effects of the vital principle, deficient excitability, &c. Unfortunately, therefore, we have no ſign of death, on which greater dependance can be put, than corruption, until we ſhall be able to diſcover the commencement of the free activity of

of the chemical powers, which takes place before it is perceptible to us by external ſigns.

" Every thing that has been ſaid of the vital principle may be applied to life. Life is a product of the vital principle, depending on the ſtate of the organization and external ſtimulants. We cannot properly call it, as Brown does, a forced ſtate; ſince it is as free as the vital principle, though it cannot exiſt but under certain conditions.

" The different degrees of life are as thoſe of the vital principle. Its ſtrength or feebleneſs depends on the quantity and activity of the vital principle.

" The quantity and activity of the vital principle are not always in the ſame ratio A great deal of life may exiſt where the activity of the vital principle is ſmall, and irritability weak, On the other hand it is poſſible that, with a high degree of vital activity, life may be exceedingly feeble. This is immoderate, diſeaſed vital activity and irritability, which often manifeſt themſelves a little before death, and by which the ſmall quantity of the vital principle ſtill remaining is ſoon exhauſted. The only proof of a great deal of life is a continual uninterrupted activity of the vital principle, without being exhauſted. Thus people in the years of youth, can, without injury to their powers, undertake very ſevere labour.

" For this purpoſe a great ſuſceptibility of the organization for the vital principle is required; and conſequently ſolid, irritable fibres; theſe muſt,

" 1. Have the property of being eaſily acted upon by the vital principle.

" 2. Muſt be durable enough to bear the continued impulſe of ſtimulants.

" The organization loſes both theſe in old age; and hence ariſe inſenſibility, weakneſs, and rigidity."

The ſecond part is entitled Aſthenocomic, or the means of maintaining and ſupporting feeble life; it concludes with the treatment of the ſo called incurable diſeaſes, and the means of palliating urgent ſymptoms; ſuch as pain, lethargy, heat, thirſt, diarrhœa, cramp, &c. &c.

Our readers will readily perceive how much Dr. S. is indebted to the Brunonian Theory, and he does not wiſh to conceal it. He ſays, " He found ſomething good in the work throughout; and he conſidered it his duty to make uſe of it."

Practical Obſervations on the Cure of the Gonorrhœa Virulenta in Men. By THOMAS WHATELY, Member of the Royal College of Surgeons in London. 8vo. pp. 119. Price 2s. 6d. London, 1801, Johnſon, &c.

THE Author ſupports the generally received opinion reſpecting the identity of the Virus of Gonorrhœa and Chancre, in oppoſition to Mr. B. Bell, &c. and then proceeds to aſcertain the ſeat of gonorrhœa in men.

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" The gonorrhœa virulenta in men was ſuppoſed by many of the old writers, to be a diſeaſed ſecretion from the proſtate gland, the veſiculæ ſeminales, and Cowper's glands; but diſſections by later ſurgeons have demonſtrated, that the ſeat of this diſeaſe is in the urethra, and generally within two inches of its extremity, from which iſſues a diſcharge of a yellowiſh or greeniſh purulent matter. This diſcharge is produced by an inflammation, excited by the action of the venereal poiſon, on the inner membrane of this part of the urethra. The diſeaſe is ſometimes, but not always, attended with a chordee, ardor urinæ, &c. This variation is evidently owing to a difference in the degree of inflammation, and eroſion of the ſurface of the urethra, in ſuch caſes.

" As it will be of conſiderable importance, in the treatment and cure of this complaint, to aſcertain the exact effects produced by the poiſon on the urethra, in all the different varieties of the diſeaſe, I ſhall endeavour to point them out. It has been believed, that the gonorrhœa aroſe moſt frequently from ulcerations in different parts of the urethra, or the glands adjoining to it; but the reſearches of modern anatomiſts ſeem very nearly to have overthrown this opinion, and it has of late been aſſerted, that an ulceration of the urethra never takes place in this diſeaſe. This doctrine appears to have been firſt advanced about the year 1750, by that celebrated anatomiſt the late Dr. Wm. Hunter, who taught it in his lectures. But although it is certainly true, that in moſt inſtances of gonorrhœa there is no ulceration of the urethra, it is equally certain that this is not univerſally the caſe, as ſuch a diſeaſe does ſometimes, though rarely occur.

" In my own practice I have in a common gonorrhœa, now and then, met with ulcers in the urethra. Where its orifice has been naturally wide, I have ſeveral times diſtinctly ſeen them, both a little within, and at the extremity of this canal. In a few other caſes, I have had no doubt, but that ulcers have exiſted in the urethra, within about half an inch of its external oriſice, although I have not been able to ſee them. This opinion is founded on the great hardneſs of the part, (far exceeding that which would ariſe from an inflamed mucous gland) on the violence of the inflammation and diſcharge, and on finding the diſeaſe yield to no remedy but mercury given internally, or uſed in frictions. The ulcers in the urethra, which I have been able to inſpect, have been of two kinds; namely, ſuch as were in a painful corroſive or ſpreading ſtate, and attended with an adjoining hardneſs and inflammation; and ſuch as were in an indolent ſtate, with very little hardneſs or inflammation around them. It cannot therefore be doubted, but that the ſame variety exiſts in other caſes, where, from the ſmallneſs of the orifice of the urethra, the fact cannot be aſcertained by inſpection."

Mr. W. ſupports this opinion by quotations from Wiſeman, Aſtruc, Swediaur, Bell, and Monro, and then continues:

" Having, I hope, given ſufficient proofs of the exiſtence of chancres, or ulcers, in the urethra, the above extracts ſhall be followed by a ſhort one, from a very valuable and uſeful publi-

cation;

cation.—" Ulcers are alſo ſeen occaſionally in laying open the " urethra, but theſe are not frequent."†

" Where neither of the kind of ulcers before mentioned exiſts in the urethra, there is certainly a conſiderable difference diſcernable, in the depth to which the poiſon penetrates into, or excoriates the inner membrane of the urethra, in different caſes of gonorrhœa. Where a chordee and ardor urinæ take place to a conſiderable degree, and are attended with an exceſſive diſcharge, of a greeniſh purulent nature, and a conſiderable tenſion and inflammation along the courſe of the urethra, the venereal poiſon inſinuates itſelf deeper into its inner ſurface, (and particularly into the lacunæ) than in thoſe caſes where theſe violent ſymptoms do not occur, and where only a moderate yellowiſh diſcharge takes place. I have frequently perceived this difference by the eye; and I have no doubt of its being always diſcernable, were it poſſible to ſee the whole of the affected ſurface of the urethra.

" As the ſpurious or external gonorrhœa is a diſeaſe of a very ſimilar kind to that which is ſeated in the urethra, we may, with great propriety, illuſtrate by it ſome of the varieties of the latter diſeaſe. Sometimes the gonorrhœa ſpuria is attended with large and deep ulcers upon the prepuce or glans, with much inflammation and hardneſs. At other times with thoſe which are ſmall, and with al eſs degree of inflammation and hardneſs. In ſome caſes the poiſon inflames the tender ſkin and ſubjacent parts of the glans and prepuce, to ſuch a depth, as to thicken and enlarge them; but without producing diſtinct ulcers. In all theſe affections, a conſiderable ſecretion of a greeniſh or yellow pus takes place. In other caſes, the excoriation of the ſurface is merely ſuperficial, and without any thickening. The inflammation is alſo ſo ſlight as to occaſion a ſmaller ſecretion of pus, of a lighter colour than in any of the other kinds of this diſeaſe.

" Towards the more complete inveſtigation of this ſubject, it will be of uſe to obſerve, that the gonorrhœa virulenta in general affects the urethra partially; either in irregularly ſhaped patches, which are connected with each other, or in diſtinct inflamed ſpots, which ſecrete the purulent matter. I have ſometimes been able to ſee theſe appearances juſt within the orifice of the urethra. Similar appearances are more diſtinctly ſeen in the gonorrhœa ſpuria, the thin cuticle on the glans or prepuce being in this caſe croded by the poiſon. At the beginning of the diſeaſe, when the glans is naturally covered by the prepuce, an eroſion of any particular ſpot, either on the glans or prepuce, generally produces one, of a correſponding ſize and ſhape, on the part uſually in contact with it. Sometimes this appearance takes place in a number of diſtinct ſpots at the ſame time; ſo that there appear between them irregular portions of ſound cuticle. If the diſeaſe in this ſtate be neglected, the eroſion generally goes on, till the whole of the cuticle on the glans and prepuce is deſtroyed; but if the parts be waſhed only with ſimple

† Dr. Baillie's Morbid Anatomy.

ſimple water, it is uſually checked in its progreſs. I have no doubt, but that the gonorrhœa vera ſpreads alſo along the inner membrane of the urethra, by the contact of its diſeaſed ſide with the oppoſite ſound ſide; and that it would ſpread in this manner, in a ſhort time, from one end of the urethra to the other, were it not checked by the repeated ablutions of the urine."

Mr. W. in his third chapter, examines the proofs of the diverſity and eſſential difference between the poiſon of gonorrhœa virulenta, and that of the lues venerea, or ſecondary ulcers.

"From what has been advanced, there is reaſon to conclude, that the virus of a chancre, though partaking of the ſame ſpecific property, yet, nevertheleſs, differs conſiderably in its quality from that of an ulcer from a ſecondary infection. Hence we infer, that the poiſon of a bubo is nearly of the ſame kind as that of a chancre; inaſmuch, as being mixed only with a ſmall quantity of lymph in its paſſage to the gland, it has not undergone the ſame change, which it does from a long circulation, and a ſubſequent depoſition from the blood: And experience confirms the truth of this remark; buboes being known to be generally obſtinate and difficult of cure; and when they take place in a perſon afflicted with chancres, they require the ſame quantity of mercury, and the ſame degree of the affection of the mouth, as are neceſſary to cure the chancres.

"If this difference exiſts, between the poiſon of a chancre or a bubo, and that of the lues, we may ſafely conclude, that it exiſts alſo between the poiſon of the gonorrhœa virulenta, and the lues. I ſhall not, therefore, take up my reader's time, in endeavouring to prove this; for if the truth of the former be eſtabliſhed, the latter muſt likewiſe follow; if it be granted, that the poiſon of a gonorrhœa, and that of a chancre, are the ſame. From theſe elucidations of the nature, ſeat, and properties, of the gonorrhœal poiſon, we proceed to the method of treating this complaint.

"From what has been advanced in the preceding pages, it may be ſuppoſed, that the cure of the gonorrhœa virulenta would be found to be ſimple and eaſy; that as mercury, exhibited internally in a proper manner, or uſed in frictions, is known almoſt always to cure a chancre or a bubo, it would, if exhibited in a like manner, cure every ſpecies of this diſeaſe. But in ſuch an expectation we ſhall be diſappointed; for, though mercury, thus introduced into the circulation, will be found, in certain caſes, to have a very conſiderable effect towards removing the diſeaſe, yet it will ſeldom entirely eradicate it, without the aſſiſtance of other remedies.

"I ſhall divide this diſeaſe into three different ſpecies.

"Firſt, The gonorrhœa attended with ulcer in the urethra, or with a conſiderable induration of the lips of its orifice, and of a portion of the corpus ſpongioſum adjoining, but without any apparent ulcer. Theſe appearances being for the moſt part attended with a chordee, and ardor urinæ, to a greater or leſs degree.

"Secondly,

"Secondly, The gonorrhœa attended with a chordee and ardor urinæ, with other marks of a considerable inflammatory affection of the urethra and penis, but without any appearance of ulcer, or great induration of the lips of the orifice of the urethra, or of the corpus spongiosum.

"Thirdly, The gonorrhœa unattended with any of these circumstances; its chief symptom being a small purulent discharge from the urethra."

The author then proceeds to lay down the treatment proper for each of these species, and their varieties; but our limits do not permit us to enter into this detail, and we must therefore refer our readers to the work itself.

We conclude, though merely from conjecture, that this pamphlet is only a first part of a complete work on this severe punishment of vicious and sensual indulgences.

A short Account of the Royal Artillery Hospital at Woolwich, with some Observations on the Management of Artillery Soldiers, respecting the Preservation of Health. By JOHN ROLLO, M. D. Surgeon General, Royal Artillery, &c. 8vo. pp. 173, price 5s. London, Mawman.

OUR readers must long have been acquainted with the name and merits of Dr. Rollo, from his Works on Diabetes, and the Use of Acids in the Cure of Syphilis. The above correct, useful, and philanthropic Compendium of Military Hygieine and Therapeia, does in no respect derogate from his former fame.

We do most earnestly recommend these Observations and Directions to all Officers in the Army, as well as to those to whom it is particularly addressed, in the Royal Regiment of Artillery.

A Concise View of all the most Important Facts which have hitherto appeared concerning the Cow-pox. By C. R. AIKIN, Member of the Royal College of Surgeons in London. 12mo. pp. 102, price 2s. 6d. London, 1801, R. Phillips, &c.

THIS practical Manual appears to us to be admirably calculated to answer the wishes of Country Practitioners, and Surgeons in the Navy and Army; and as the sale is very extensive, and new editions are intended to be given frequently, in order that the latest and most accurate information may at all times be found in it; we take the liberty of submitting the following Hints for the next edition.

1st. A new plate.

Page 19. On the Origin of the Cow-pox as derived from the Horse, Mr. A. has not mentioned the similarity of the equine and vaccine pustule, nor the security the constitution receives from the inoculation of equine fluid.

Page 23, line 13, for, *is not* rendered thereby, &c. read, *has been* rendered, &c.

Page 38, line 10, formation of *matter*, read, formation of a *vesicle*, or let the term *matter* be explained.

Page

Page 39, line 5, " rendered much milder by *inoculation*." The Cow-pox cannot be communicated by any other means than thoſe of *inoculation*, and therefore no compariſon between the Small-pox and Cow-pox can be admitted on that ground. See p. 44, 45.

Page 57, line 9, and page 58, line 5, &c. This advice is too general, and requires to be more accurately and pointedly circumſcribed.

Page 66, line 8. The conſtitution is moſt commonly affected on the fourth and fifth days.

Page 75, line 10, &c. and note, page 76. There are no puſtular caſes reſembling Small-pox, derived from real Vaccine fluid.

Page 99, line 17. " Dr. Jenner's able *investigation*." It is but an act of juſtice due to the public and Dr. Jenner, that every writer on this ſubject, eſpecially in this country, ſhould declare unequivocally and explicitly, that Dr. Jenner is entitled to the admiration and reward of a grateful public, not merely for inveſtigating the nature of a known diſeaſe, but for conceiving and perfecting the important idea of employing that diſeaſe, diveſted of its ſeverity by art, to ſuperſede and finally annihilate the Small-pox. All foreigners have hitherto done him this juſtice.

T. B.

The number of popular Treatiſes on the Cow-pox, in all European languages, increaſes ſo faſt, that we can do little more than detail their titles.

Familiar Observations on the Inoculation of the Cow-pox, as now very generally introduced in Great Britain, and several parts of the Continent; with a View to the final Extirpation of Small-pox. By Alex. Herman Mac Donald, M. D. 4to. pp. 50. Hamburgh, 1800.

We have no heſitation in recommending this correct and impartial work to the attention of our countrymen, though compiled from our own materials, and publiſhed at a conſiderable diſtance from the ſource of the moſt recent information.

Evidences of the Utility of Vaccine Inoculation; intended for the Information of Parents. Dedicated, by permiſſion, to the Right Hon. Lord Somerville. By Thomas Creaser, Member of the Royal College of Surgeons. 12mo. pp. 36, price 1s. Bath, 1800, Crutwell.

The Author, who appears to have directed his attention to this ſubject from its firſt eſtabliſhment as a branch of medical ſcience, ſays,

" Little more than two years have elapſed, ſince Dr. Jenner announced to the public, the ſingularly curious and beneficial effects of Vaccine Inoculation. His concluſions were formed from experiments ſuggeſted by facts founded on the unerring baſis of experience. From this ſource we have derived the application of bark, mercury, opium, and almoſt all the moſt powerful agents of medical

dical ſcience. Extenſive and impartial trials of the truth of Dr. Jenner's poſitions were immediately inſtituted, and they have been proſecuted with avidity by men of the firſt talents, independent of concert or co-operation. The reſult is, that although the Inoculation of the Cow-pox is one of the boldeſt and moſt direct innovations on preceding practice, and, as ſuch, has had to encounter all the impediments which are uſually oppoſed to novelty, by the operations of ſcepticiſm, prejudice, and intereſt; yet its aſſerted and almoſt unparalleled advantages have been realized in their higheſt extent, by a maſs of irreſiſtible evidence. It is truly extraordinary, that in a meaſure ſo perfectly original, and which has been ſo immediately ſubmitted to the teſt of extenſive experiment, ſubſequent inveſtigation ſhould have tended merely to confirm the poſitions of the original propoſer. It is a law of the human mind to prefer good to evil, provided it be competently informed of their difference, and that it is not under the influence of erroneous judgment or habits. Of the quantity of evidence exiſting to demonſtrate the highly preferable nature of the Vaccine to the Small-pox Inoculation, the public want only acceſſible means of information.

" It will be neceſſary previouſly to enter into the hiſtory of the natural Cow-pox, as diſtinguiſhed from the ſame diſeaſe when applied by inoculation, and as the origin of the latter. The cow, though in general a healthy animal, is ſubject to this and a few other diſeaſes.

If, in a popular work, we may be allowed to digreſs a little into the pathology of animals, it may be obſerved, as a curious fact, that their prediſpoſitions to diſeaſe are of the ſpecific kind. The horſe is liable to broken-wind, farcy, glanders, and greaſe, excluſive of ſome local diſeaſes, the greater number of which do not ariſe from original or natural cauſes, but from the unnatural and violent ſituations to which he is expoſed, whilſt adminiſtering to the utility and luxury of man. The ſheep is diſpoſed to the diſeaſe termed the rot, and to hydatids of the brain. The dog to its peculiar affection called the diſtemper, to mange, and hydrophobia. The cow is particularly liable to the diſeaſe of which we are treating, and to the yellows, which are ſimilar to the human jaundice. Much phyſiological conſideration ariſes out of theſe obſervations; not only the morbid ſecretions of the ſame animal are capable of converſion and mutual change, but alſo the ſame morbid poiſon, applied to different animals, ſeems to produce not a ſimilar and ſpecific diſeaſe, but the diſeaſe to which the animal, from conſtitution and ſtructure, is pre-diſpoſed. It is now confirmed, according to Dr. Jenner's original theory, that the Cow-pox originates in a morbid poiſon communicated from the greaſy heel of the horſe; yet this poiſon does not produce the Cow-pox in the human ſubject, till it has been received by, and tranſmitted from, the cow. My friend Mr. Coleman, Profeſſor of the Veterinary College, has created glanders by inoculating the membrane of the noſtrils of the horſe from its farcy buds, as they are termed;

i. e. inflamed and ulcerated lymphatics; the same effect took place, *vice versa*, from glanders to farcy; and, which is truly singular, Dr. Jenner informs me, that dogs, inoculated with vaccine matter, acquire their peculiar affection, termed the Distemper. These speculations lead us to a vast field of consideration concerning the modifications of morbid poisons, and they teach us also not to regard the introduction of them as hazardous on another class of animals, when they become remedial alternatives."

This is a beautiful little work, and admirably calculated to answer the views of the enlightened Author.

Memoire sur l'Inoculation de la Vaccine a Geneve, par L. Odier, Dr. & Prof. en Medicine; 8vo. pp. 30.

This excellent pamphlet describes several kinds of eruptions which may occasionally take place during the progress of the Vaccine Inoculation, but not essentially connected with it.

Essai sur l'Inoculation de la Vaccine, ou moyen de se preserver, pour toujours et sans danger de la petite Verole; par F. Colon, M. D. 8vo. pp. 36. Paris.

That our Readers may see in more lights than one, the ardour with which the new Inoculation is pursued in France, we present them with a translation of this Author's Introduction.

"However astonishing the discovery of the Vaccine Inoculation may appear, and although the English have enjoyed the benefits of it for upwards of two years with the greatest success, its benefits are, nevertheless, scarcely known in France.

"It is well known that about the commencement of the last autumn, M. Larochefoucault Liancourt proposed to open a subscription for defraying the expences necessary to make proper trials of the Vaccine Inoculation, and to decide on its preference to that of the Small-pox. This proposition of M. Liancourt was cordially received by many benevolent individuals: In a short time a fund was raised adequate to the object proposed.

"A medical committee was appointed to verify the phænomena which precede, accompany, and follow the Vaccine Inoculation.

"To hasten as much as possible the issue of these proposed trials, I offered my house at Vaugirard, where forty could be constantly under inoculation without the possibility of any extraneous influence on the progress of the disease.

"In thus paying my tribute to the discovery which at present engrosses the attention of the medical world, I acquired an opportunity of observing its success, and of being able to speak of it with some degree of knowledge.

"I by no means propose here to enter into minute details, or to write as a member of the medical committee on the Vaccine Inoculation: My individual opinion has nothing in common with the relation in which the committee is bound to the public. They will,

will, no doubt, ſpeedily publiſh the reſult of their experience,* and will ſatisfy the expectations and confidence of profeſſional men and the public at large; but having inoculated the Vaccine at Paris, amidſt the clamours of a party that wiſhed to oppoſe its propagation, I owe it to thoſe perſons who have honoured me with their confidence, to lay before them the facts which have determined my conviction, that this new Inoculation merits the preference over the old.

I pretend to no more than to give a general knowledge of the Vaccine and its advantages, to the end that thoſe who are not of the profeſſion, as well as young phyſicians who have not been able to purſue the experiments made in my houſe, might yet be able to form juſt ideas, by which they will be able to confute the lies, and the abſurd clamour raiſed againſt this method by intereſted men, or thoſe who know nothing of the matter.

"I ſhall endeavour, above all, to ſteer equally clear of blind credulity, which adopts every thing, and that intereſted and party ſpirit, that would oppoſe nature herſelf, as well as the progreſs of uſeful knowledge.

"It was in effect this ſpirit of party, which on the firſt introduction of the Vaccine, raiſed the cry of *innovation*, and ſounded the *tocſin* of prejudice againſt trials, which had for their object, a concern as important as any within the ſcope of medicine.

"It required the conſtancy, the ſpirit of wiſdom which directs the medical committee to reſiſt theſe clamours, which are only a repetition of the attempts made in the laſt century to prevent the introduction of Inoculation into France.

"There was, undoubtedly, prudence and good ſenſe in retaining their judgment on a ſubject of this importance, till the committee, by its report, had freed the ſubject from all difficulties; but jealouſy alone, and obſtinacy, were able to give birth to ſuſpicions on the validity of experience itſelf, and on the motives which actuated men, who, from a zeal truly laudable, make perſonal ſacrifices to examine and verify the trials of the Vaccine Inoculation.

"In this eſſay I ſhall explain what the Vaccine is, the varieties of which it is ſuſceptible, and the advantages it poſſeſſes over the common Inoculation. I ſhall anſwer various objections which I have heard from thoſe who wiſh to throw obſtacles in our way; and I ſhall conclude with a comparative table of the effects of the inoculated Small-pox and the Vaccine."

This ſhort work performs all it promiſes, and muſt have produced a conſiderable effect in removing the prejudices of the Author's countrymen.

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* See page 356.

Comparative View of the Theories and Practice of Drs. Cullen, Brown, and Darwin, in the Treatment of Fever and of Acute Rheumatism. By H. Xavier Baeta, M. D. 8vo. pp. 55, price 1s. 6d. London, Johnson.

Dr. Cullen's Spasmodic Theory of Fever is familiar to every practitioner: See his First Lines, § 46, &c.

Dr. Brown's Theory of Fever is thus stated by Dr. Baeta.

" Dr. Brown supposes the proximate cause of fever to consist in debility (Elem. of M. par. 679) which may be either direct or indirect, according to the nature of the noxious powers which were previously applied to the system. (Elem. of M. par. 681) Hence he makes two divisions of fevers;—1st, Those which depend on direct debility: in this he ranks some intermittent fevers, the typhus mitior and gravior, the plague, &c. (Elem. of M. par. 685, 6)—2d, Those which depend on indirect debility: under which division he ranks some intermittents, and some continued fevers, occasioned by drunkenness, the confluent small-pox, &c. (Elem. of M. par. 687) Hence he forms two indications in the cure of fevers, just according to those divisions for removing direct and indirect debility, (Elem. of M. par. 103—110) viz. In fevers dependent on direct debility, he recommends diffusible stimuli in small doses, and often repeated; (par 686) in those dependant on indirect debility, he orders the largest doses of stimuli. (par. 687.)

In stating Dr. Darwin's Doctrine of Fever, the author premises a few observations or principles, viz.

" Before we enter into the consideration of this doctrine, we shall lay down some principles deduced from the Zoonomia.

" 1st. There is in every part of the animal system a living principle, which is termed sensorial power, and which is considered as the immediate cause of all its motions (Zoon. part i. sect. 4.) This is supposed to be secreted in the brain and spinal marrow, (Zoon. part i. sect. 12, 2, 1.)

" 2d. This living principle is capable of being acted upon in four different ways, viz. it possesses four different faculties or modes of action, which in their inactive state are called irritability, sensibility, voluntarity, and associability; and in their active state, or while they are exerted, they are termed irritation, sensation, volition, and association. (Zoon. vol. i, sect. 5.)

" 3d. The faculty of that living principle, which is termed irritability, is exerted in consequence of the stimulus of external bodies acting on any part of the system where sensorial power resides, and it then may produce fibrous motions. That of sensibility is exerted in consequence of the stimulus of pleasure or pain, occasioned by the fibrous motions produced by the sensorial power of irritation at first. That of voluntarity is exerted in consequence of the stimulus of desire or aversion, occasioned by the fibrous motions produced by the sensorial power of sensation at first. That of associability is at first exerted in consequence of the stimulus

lus of any fibrous motions, previouſly occaſioned either by irritation, ſenſation, or volition. (Zoon. vol. i. ſect. 4 and 12.)

" 4th. During the application of any of theſe ſtimuli, (Prin. 3d,) the living principle, or ſenſorial power, becomes exhauſted; on the contrary, during the ſubduction of any of theſe ſtimuli the ſenſorial power becomes accumulated.

" 5th. There are various circles of aſſociate motions in the animal ſyſtem, which may take their names from the nature of their introductory link: that is, thoſe circles, the introductory link of which conſiſts of an irritative motion, may be termed circles of irritative aſſociate motions: thoſe, the introductory link of which conſiſts of a ſenſitive motion, circles of ſenſitive aſſociate motions; and laſtly, thoſe, the introductory link of which conſiſts of a voluntary motion, circles of voluntary aſſociate motions. (Zoon. vol. ii. Claſs IV. 1, 1, B.)

" 6th. The links of each of theſe circles act on one another by means of the ſenſorial power, which in its inactive ſtate is called ſenſorial power of aſſociability, and in its active ſtate ſenſorial power of aſſociation. (Zoon. vol. i. ſect. 5.)

" 7th. Theſe circles of aſſociate motions may be affected by other ſenſorial motions, occaſioned by the ſenſorial powers of irritability, ſenſibility, and voluntarity. (Zoon. vol. ii. Claſs IV. 1, 1, D.)

" 8th. Each of theſe great circles of aſſociate motions may be conſidered as compounded of ſmaller circles, that is, the great circle of irritative aſſociate motions may be looked on as a collection of ſmaller circles of the ſame kind. (Zoon. Supl. 1ſt. 6.)

" 9th. The introductory link of any circle of aſſociate motions, may have its action increaſed, or decreaſed, or in its natural degree. The firſt may take place either in conſequence of exceſs of ſenſorial power, the ſtimuli being in their accuſtomed degree; or, in conſequence of exceſs of ſtimuli, the ſenſorial power being in its natural degree; or in conſequence of exceſs of both. The ſecond may ariſe either from want of ſenſorial power, the ſtimulus being in its uſual degree; or from ſubduction of ſtimuli, the ſenſorial power being in its natural quantity; or from want of ſenſorial power, and ſubduction of ſtimuli. The third takes place, when both the ſenſorial power and the ſtimuli are in a proper degree.

" 10th. Sometimes the morbid increaſed, as well as the morbid decreaſed, actions of the introductory link of a circle of aſſociate motions are followed by ſimilar actions of the other links; at other times by contrary actions: In the firſt caſe we have direct, in the ſecond indirect ſympathy. (Zoon. vol. i. ſect. 35, 1; and vol. ii. Claſs IV. 1, 1, F.)

" 11th. The morbid decreaſed actions, which ariſe from ſubduction of ſtimuli, are ſooner overcome than thoſe which are occaſioned by want of ſenſorial power. (Zoon. vol. ii. Sup. 1, 12, 10.)

" 12th. The morbid increaſed actions, which ariſe from exceſs of ſenſorial power, are more violent than thoſe which are produced by

by exceſs of ſtimuli. Hence inflammatory diſeaſes are commonly preceded by ſubduction of ſtimuli, and conſequent accumulation of ſenſorial power, &c. But when exceſs of ſenſorial power is acted upon by exceſs of ſtimuli, the exertion which follows is far ſuperior. Hence mortification of frozen limbs, when brought near the fire. (Zoon. vol. ii. Claſs III. 2, 1, 17.)

" 13th. Thoſe parts which are ſubjected, during health, to perpetual action, as the heart and arteries, accumulate ſenſorial power faſter, when their motions are impeded, than thoſe which are ſubjected to intermitted action. (Zoon. vol. ii. Supl. 1, 3, 1.)

" 14th. When ſtimuli, which are uſually applied to a certain part of the ſyſtem, are ſubducted from it, an accumulation of ſenſorial power takes place there, proportioned to the ſubduction of thoſe ſtimuli, and to the ſtate of that part.

" 15th. The exertion of any part of the ſyſtem may be either proper or greater, or ſmaller than it ought to be; and ſo either health, or inflammation, and the various degrees of exhauſtion of ſenſorial power, or torpor from accumulation of ſenſorial power, will enſue.

" 16th. Fever conſiſts of one or more diſordered trains or tribes of aſſociated motions. (Zoon. vol. ii. Claſs II. 1, 2) Hence fever will be more or leſs complicated, according to the number of the tribes diſordered.

" After theſe principles, Dr. Darwin's doctrine of fever may be conſidered as follows: When the torpor of any part of the ſyſtem, owing to deficient irritation, occaſioned either by the ſubduction of the natural ſtimuli, and conſequent accumulation of ſenſorial power, or by the application of powerful ſtimuli, and conſequent exhauſtion of the ſame living principle (Prin. 4th, 7th, and 14th) is ſuch as to occaſion decreaſed actions of that part, what happens? The next link of the tribe of aſſociate motions falls alſo into a torpor, from defect of excitement of the ſenſorial power of aſſociation, and ſo the ſubſequent one, till a general torpor affects the ſyſtem. This conſtitutes the cold paroxyſm of fever. This general torpor remains, till the accumulation of the ſenſorial power of aſſociation has been formed, which may overbalance that defect of excitement of aſſociation, and then the torpor ceaſes, and the hot fit of fever is produced.

" When the torpor of the part firſt affected is occaſioned by the ſubduction of the natural ſtimuli, this part is likewiſe thrown into increaſed actions during the hot fit. But if it ariſe from exhauſtion of ſenſorial power, this part remains in a torpid ſtate during the hot fit. (Prin. 11)

" The torpor induced by the ſubduction of the natural ſtimuli, as it is overcome at the end of the cold fit, (§ xviii) always gives riſe to fevers with ſtrong pulſe; ſince in this caſe all the parts of the ſyſtem have their actions increaſed during the hot fit. (Prin. 12)

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" The torpor induced by the exhauſtion of ſenſorial power produces various effects, according to the part in which it takes place. When it takes place in the ſtomach, it is always a cauſe of continued fever with weak pulſe. (Zoonomia, vol. ii. Supl. 1. 16. 9) In this caſe, in conſequence of the torpid ſtate of the ſtomach, the arterial ſyſtem falls likewiſe into a torpor, from defect of the excitement of the ſenſorial power of aſſociation; (Princ. 6 and 10) therefore an accumulation of this ſenſorial power of aſſociation takes place in the arterial ſyſtem: but this accumulation is ſo great, owing to the perpetual actions of the ſtomach catenated with thoſe of the arterial ſyſtem, (Princ. 13) that it affects the next link of the aſſociate train, that is, the capillaries, with increaſed energy. (Princ. 10) Hence theſe laſt, in this kind of fever, are perpetually exerted with great increaſe of action.

" When this torpor affects the ſecerning veſſels of the brain, Dr. Darwin thinks, that it is a cauſe of fever with arterial debility. (Zoonomia, vol. ii. Supl. 1. 10) In this caſe, the ſecretion of ſenſorial power being more or leſs impaired, muſt occaſion languid actions of every part of the ſyſtem. (Princ. 1) In fevers with arterial debility, ariſing from this cauſe, the actions of the capillaries are diminiſhed along with the actions of the reſt of the ſyſtem. Hence the heat of the body is never above the natural ſtandard, and ſometimes it is even lower throughout the courſe of the diſeaſe; which phenomenon I have obſerved ſometimes in patients labouring under continued fever with arterial debility.

" Though Dr. Darwin does not mention the torpor from exhauſtion of ſenſorial power in the arterial ſyſtem, as a cauſe of continued fever with arterial debility, yet, conſidering that the ſtimulus of the blood may be more or leſs increaſed, in conſequence of a greater or ſmaller quantity of oxygen, I make the following query: May not the ſenſorial power of irritation be accumulated for a while in the arterial ſyſtem, by the ſubduction of the ſtimulus oxygen? And afterwards, by a ſudden application of this ſtimulus in a great degree, that is, by inſpiring at once a large quantity of pure oxygen gas, may not a violent exertion take place there, ſo as to produce an exhauſtion of the ſenſorial power of irritation, and to render the arterial ſyſtem unfit to derive from the brain and ſpinal marrow a proper quantity of ſenſorial power, (See note (*l*) Princip. 11.) which may therefore give riſe to a fever with arterial debility?

[To be continued.]

MONTHLY

MONTHLY REPORT of DISEASES,

Admitted under the Care of the PHYSICIANS of the FINSBURY DISPENSARY, St. John's Square, Clerkenwell.

From Feb. 20, to March 20, 1801.

	No. of Cafes.		No. of Cafes.
Chlorofis and Amenorrhœa	25	Infantile Diſeaſes - - -	32
Menorrhagia - - - -	8	Anaſarca - - - - - -	9
Diarrhœa - - - - -	17	Cephalæa - - - - - -	2
Cough and Dyſpnœa - -	45	Epilepſy - - - - - -	6
Phthiſis Pulmonalis - -	3	Hyſteria - - - - - -	3
Cynanche Tonſillarum -	5	Aſthenia - - - - - -	48
Eryſipelas - - - - -	16	Hypochondriaſis and Dyſ-	
Continued Fever - -	27	pepſia - - - - - -	39
Chronic Eruptions - -	21		

The caſes of amenorrhœa conſtitute a conſiderable proportion in the above liſt. In a diſeaſe which is characterized by a general debility, and ſeldom attended by local inflammation, it is much to be wondered at, and to be lamented, that phyſicians ſhould have ſuch frequent recourſe to the remedy of blood-letting; which cannot fail, by weakening ſtill farther, to aggravate all the morbid ſymptoms it was intended to alleviate.

By no means is it uncommon for repeated veneſections in ſuch caſes to occaſion an effuſion upon the lungs, which ſoon terminates the ſufferings, by terminating the exiſtence of the patient.

That relaxation of body, that irritability and dejection of ſpirits, and thoſe various pains and uncomfortable feelings with which the young chlorotic female complains of being afflicted, are not to be relieved by bleeding, or any kind of lowering evacuants; but, rather by the aſſiduous application of thoſe mental and phyſical ſtimuli, the direct tendency of which, is to induce a ſtate of univerſal vigor and excitement.

Out of the great number of patients afflicted with this complaint, that have come under the care of the Reporter during the laſt fifteen months of his practice at the Diſpenſary, he recollects ſcarcely a ſingle inſtance, in which ſteel, in ſome ſhape or other, did not in a longer or ſhorter time, accompliſh the object which he had in view.*

Caſes

* To ſome it may ſeem remarkable, that ſo many caſes of amenorrhœa ſhould have fallen within the ſphere of Diſpenſary practice, as this is a diſeaſe that is, comparatively, ſeldom obſerved amongſt the lower claſſes of ſociety; it is therefore neceſſary to ſtate, that although a conſiderable number of our patients are from amongſt almoſt the pooreſt of the community, there is ſtill a large proportion of them, who, living as domeſtics in opulent families, ſhare in the luxuries of their ſuperiors, and of courſe, in common with them, experience all the bad effects of good living. Beſides, it is not ſingular for governors of the charity, who are in a decent and even rather in

Cafes of fevers have conſiderably decreaſed in number during the laſt month, whilſt catarrhal and aſthmatic affections have been much more extenſive in their prevalence, as well as troubleſome in their ſymptoms. In theſe complaints, eſpecially when they attack the aged, little is to be done either by the apothecary's art, or by the ſkill of the phyſician; an accurate attention to *clothing* and *diet* is almoſt all that can with advantage be recommended, unleſs indeed a change of air, which, however, amongſt the lower claſſes, is ſeldom practicable. The writer of this article has more than once ſeen a perſon, at an advanced period of life, afflicted with theſe catarrhal and aſthmatic affections, ſuddenly deprived, by the mercileſs hand of an empirical practitioner, of almoſt all the few drops of blood that ſtill lingered in his withered and nearly exhauſted veins. The diſtended and over-charged veſſels of the vigorous and the young may admit, and ſometimes even require, a partial evacuation of their contents. But to take from an emaciated old man, bent under the weight of years, any part of that vital fluid, with which he is ſo ſcantily provided, is an act that would never be raſhly committed by any diſcerning or intelligent practitioner. Fewer murders, perhaps, have been perpetrated by the ſword than by the lancet. Next to the vaſt ſcythe of Time, ſcarcely is there any weapon that has committed more cruel ravages than thoſe which have been effected by this powerful, although minute inſtrument of deſtruction.

The inſtances of hypochondriaſis, recorded in our liſt of diſeaſes, have in general occurred at an advanced period of life. There are few perſons indeed at an advanced period of life, in whom we may not detect, in a greater or leſs degree, the ſymptoms of this diſeaſe. Objects in general, having loſt in a good meaſure their power of intereſting, being no longer entertained by the amuſements, nor engaged earneſtly in the ſerious occupations of life, and moſt of thoſe ſocial connections being broken which tended ſomerly to divert his attention from himſelf, it is no wonder that the mind of an old man ſhould often become occupied almoſt entirely by the daily increaſing infirmities of his body.

This will be ſtill more likely to occur in thoſe caſes where a perſon has been ſo unfortunate as, in the earlier periods of his life, to expend in licentious and enfeebling pleaſures, the whole of that corporeal vigor, part of which ought carefully to have been reſerved for the comfort and the ſupport of age. A remark which might be illuſtrated by the inſtance of a celebrated perſonage in ſacred ſtory, who, after having exhauſted the powers of his con-

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an affluent condition, to convert the privilege which their annual ſubſcription affords them, to the relief of their own wives and children, as well as of other friends, who ſtand on the ſame level of life with themſelves! A circumſtance which, although in various reſpects highly conducive to the advantage of a young practitioner, cannot but appear glaringly inconſiſtent with the nature and object of a charitable inſtitution.

ſtitution, by that unlimited debauchery to which his youth and manhood were devoted, at length complains, in the true temper of an hypochondriac, that—"*All is vanity and vexation of ſpirit.*"

Red Lion Square. J. R.

MEDICAL AND PHYSICAL INTELLIGENCE.

[FOREIGN AND DOMESTIC.]

Extract of a paper on the genus of Lime-tree (Tilia), read at the National Inſtitute, by VENTENAT.

LINNÆUS has mentioned in his Species Plantarum, only two ſpecies of lime-tree, to which he gave the name of *Europæa* and *Americana*; but as there are more diſtinct ſpecies of this tree to be met with in Europe as well as in America, thoſe names cannot conveniently be retained, becauſe one might ſuppoſe by them, that the other ſpecies do not grow in Europe or in America.

Miller, in his Gardener's Dictionary, deſcribes two American ſpecies of lime-tree, retaining the name of *Americana*, for that which was known to Linnæus, and aſſigning to the other, brought from Carolina by Cateſby, the name of Caroliniana; but this cannot likewiſe be adopted, ſince *Michaux* and other botaniſts have diſcovered in Carolina, another ſpecies of lime-tree, different from that found by Cateſby. Mr. Aiton, in his Hortus Kewenſis, has probably changed, on that account, the name of *Caroliniana* into that of pubeſcens. Mr. Walther diſtinguiſhes a ſpecies of lime tree, native of Carolina, "*Tilia Americana, floribus nectario inſtructis, ſtipulis floriferis*;" but as this deſcription agrees evidently with all the lime-trees that may grow in the whole extent of America, it is obvious how difficult it would be to determine which ſpecies Walther may have meant, if the naturaliſts who travelled in Carolina had not brought with them ſpecimens of the tree, which the Engliſh botaniſt meant to characteriſe.

After having given the generic character, *Mr. Ventenat* deſcribes the following ſpecies, of which he has given figures.

Lime-trees of Europe, with naked petals.

Tilia microphylla.—Foliis cordato-ſubrotundis, acuminatis, argute ſerratis, capſula ſubgloboſa, minime coſtulata, tenuiſſima, fragili. Var. fructo oblongo, utrinque acuminato, Tilli Hort. Piſan. T. 49. fig. 3.

T. platyphyllos.—Foliis cordato-ſubrotundis, acuminatis, inæqua-

liter

liter ſerratis, capſula turbinata, coſtis prominentibus, inſignita, lignoſa, craſſa. Var. Carolina, Ait. Hort. Kew.

Lime-trees of America; petals provided with a ſcale, at their baſis.

T. glabra.—Foliis profunde cordatis, ſerratis, glabris; petalis a pice truncatis, crenatis, capſula ovata, ſubcoſtata (T. Americana L.)

Habitat in Virginia et Canada.

T. pubeſcens. Ait.—Foliis baſi truncatis et obliquis denticulato ſerratis, ſubtus pubeſcentibus, petalis emarginatis, capſula globoſa lævi.—T. Caroliniana Mill.

Habitat in Carolina.

Var. leptophylla, foliis tenuiſſimis, ſubpapyraceis. Habitat in Louiſiana.

T. rotundifolia.—Foliis cordato-ſubrotundis, ſubſinuatis, dentatis verticalibus ſubtus tomentoſis; capſula ovata, obſcuri nervoſa. T. alba Ait argentea Mus. nat.

Habitat in America ſeptentrionali.

T. heterophylla.—Foliis ovatis, argute ſerratis, baſi nunc cordatis nunc oblique aut æqualiter truncatis ſubtus tomentoſis, capſula globoſa, multinervoſa.

Habitat in Carolina inferiori, et in Marylandia.

Mr. Ventenat terminates this paper, by preſenting ſome obſervations on the culture of the ſpecies of this genus, on the ſoil that agrees with them, and on the advantages that may reſult from them to the community.

On a new Method of preparing Ice Vinegar.

It is about ten years ago that Profeſſor Lowitz, of Peterſburgh, diſcovered the cryſtallizibility of the moſt concentrated acetic acid, which, when reduced into that ſolid ſtate, obtains the name of *ice vinegar*. This high degree of concentration is chiefly attained through the medium of ſulphuric acid, with the help of a hard froſt during the winter: The proportion in which this acid was added to the acetic ſalt, according to the preſcription of Mr. Weſtendorf, is 1:2. Profeſſor Lowitz, however, propoſes an eaſier and more profitable method for exhibiting from wine vinegar, as well as from that of malt liquors, an ice vinegar, which is much ſuperior in ſtrength to that prepared in the former way. By taking to *three* parts of the acetic ſalt *four* parts of ſulphuric acid, from a hundred parts of the ſalt, ſixty-one parts of ice vinegar will be obtained, which, when once coagulated, requires 10° Reaumur for being again liquefied. But the whole proceeding is as follows: Saturate three or four pounds of purified potaſh with wine or beer vinegar, which has been diſtilled over charcoal powder; evaporate the ſaturated liquor to the conſiſtence of a dry powder, of which put three pounds, accurately weighed, when ſtill warm, into a glaſs, previouſly heated, and ſhut it with a glaſs ſtopper. Then pour three pounds of ſulphuric acid into a retort, provided on its upper part with a pipe, and join to it a receiver, large enough

enough for containing about twenty pints of water. Begin to add to the sulphuric acid the above salt in small portions, shaking and stirring it frequently. After having mixed all the salt, add by degrees one pound more of sulphuric acid, and shut the pipe with a wet bladder; suffer the whole to stand quietly one night. The next morning place the retort into the sand pot of a furnace, so deeply, that the sand between the bottom of the pot and the retort be only about half an inch thick; put the receiver into a refrigatory filled with very cold water, after which apply a gentle fire. About one hour after, the distillation commences by white fumes appearing in the vessels, at which time the fire must be very carefully managed. The drops that go over may succeed one another quickly, without any danger of the vessels being cracked; but be very careful that no coherent streams run over, and likewise take care that the thick and white fumes only lodge in the lowest part of the receiver; and when they begin to rise, particularly with a whirling motion, take the fire immediately out of the furnace. It is, besides, necessary to refrigerate often the upper part of the receiver with cold water, or, which is still better, with snow or ice. —The ending of the distillation is known by the disappearance of the white fumes, by the drops running over much slower, and particularly by the liquefaction of the residuum to a black frothing fluid that goes easily over into the receiver. At the moment of the liquefying and frothing of that substance, the receiver ought to be taken off, and another put on, into which five or six drachms of a much weaker and disagreeably smelling acetous acid will go over; that, however, may be used for purifying the ice vinegar from the adherent sulphureous acid; when, after being diluted with water, it is saturated with barytes, filtrated, and evaporated to dryness. The residuum is ground to a fine powder, and together with charcoal powder, added to the ice vinegar; after which the mixture ought to be rectified over a gentle fire to the dryness of the residuum. Of 3lb. of acetite of kali, 22 oz. of ice vinegar were obtained by this new method. *(Crell's Chemical Annals,* 1800.)

On the internal use of Phosphorus. — Prof. Brera relates a case, where two grains of phosphorus triturated with sweet oil and the yolk of an egg, and mixed with cinnamon water, brought on death, by causing burns in the intestinal canal, though they were only given by degrees, in the space of two days; and besides, an experiment with a dog of eight months, that was killed after five days, by four grains of phosphorus triturated with gum arabic, and administered in four doses in the course of one day. A similar instance is mentioned by Dr. Kortum, of a man, who having suffered an apoplectic fit, retained a palsy of the left arm, and a weakness in the left foot, against which, all possible stimulants had been employed in vain. At last the doctor determined to try the phosphorus, and two grains of it were accordingly triturated with gum arabic and sweet almonds, and an emulsio phosphorata prepared after the prescription of Prof. Hufeland, consisting of seven ounces.

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Of this emulſion the patient was ordered to take only twice a day a table ſpoonful, in order to ſee whether his weak ſtomach could bear the remedy; but four days after, having hardly taken one half of the mixture, and conſequently only one grain of phoſphorus, the patient felt himſelf much heated, the pulſe became febrile, a congeſtion of blood towards the head aroſe; ſeveral bilious vomitings enſued, and the patient complained particularly of a diſagreeable tenſion and dryneſs in the breaſt. Cooling purgatives and an emulſion of ſweet almonds removed thoſe complaints in a few days, though the tenſion in the breaſt, with much coughing, remained a long time after, and the ſtomach became ſo weakened, that it required for ſeveral weeks the uſe of bitters before it was reſtored. It appears from theſe inſtances, how cautiouſly that powerful remedy muſt be uſed. (*Hufeland's Practical Journal.*)

For diſtinguiſhing the rheumatic head-ach from that which ariſes from crudities in the ſtomach, Dr. Dürr points out the following diagnoſtics: 1. The firſt remits ſometimes ſo much of its vehemence, that the patient remains free from it for ſeveral hours, whereas the other kind of head-ach continues with equal violence. 2. On moving the head the patient feels greater pains in the rheumatic head-ach. 3. This kind of head-ach is increaſed by cold, and the patients are therefore obliged to cover the head. 4. As ſoon as pains come on in other parts of the body, it begins to abate, and increaſes again when thoſe go off. 5. The leaſt motion of the head excites that head-ach again, after its having previouſly abated. 6. The rheumatic head-ach is limited to one part of the head, whereas that ariſing immediately from the ſtomach affects the whole head, or, at leaſt, the fore and back part of it. (*Ibid.*)

Dr. Corradori made ſome time ago the intereſting obſervation, that the *Tremella Noſtoc* had changed into three different plants, viz. *Tremella verrucoſa, Lichen faſcicularis*, and *rupeſtris*. He remarked afterwards, that it was likewiſe transformed into *Tremella lichenoides*, or Lichen tremelloides, *L.* though a part kept the form of *Noſtoc*. Growing upon moſſy ſlopes, it changed into *L. gelatinoſus;* upon ſtones or ſand into *L. criſpus*. On moiſt rocks, the *Tremella Noſtoc* was changed into a plant, coming near to *L. rupeſtris*. *Tremella verrucoſa* and *L. criſpus*, which are found on old walls, were metamorphoſed into *L. granuloſus*. Theſe curious changes are particularly favoured by wet and warm weather; but when the Tremella has reached a certain age, it remains conſtant; if it has once changed, this protheiform plant never recovers its former ſtate. Of Tremella, he gives the following definition, "A plaſtic vegetable ſubſtance, which is nouriſhed by intus-ſuſception." (*Annali di Chemica et Storia Naturale, T.* 17, 1798, No. 101.)

Dr. Corradori has communicated ſeveral intereſting obſervations on *glow worms*, and their difference with reſpect to their colour, and the number of ſhining rings. Several naturaliſts have attempted

tempted to explain this phenomenon, amongſt whom *Spalanzani* aſcribed it to a ſlow combuſtion; but this Dr. Corradori denies, and rather thinks it owing to a diſſipation of aggregated light, an opinion which ſeems to be confirmed by his experiments with worms put in oil, or boiling water. He proves it likewiſe by the experiments of *Becherheim*, who has ſhewn that theſe worms thrown into gaſes improper for combuſtion, continued to give light. Beſides this, *Beccari*, *Brugnatelli*, and *Dufay* have demonſtrated, that light is capable of combining and aggregating itſelf in bodies in more or leſs quantity, in proportion to their capacity of receiving it. He next proceeds to the queſtion, whether theſe ſhining worms are chryſalides or female individuals of different winged inſects, to which latter opinion, adopted by Linnæus, he is inclined to aſſent. According to which, *Lampyris ſplendidula* is a ſpecies of phoſphoric inſect, the female of which is not winged, and produces that light. The blackiſh glow-worm ſeems to be a different ſpecies of Lampyris, and not Italica, for which it was taken by Linnæus. *(Ibid.)*

The following is the arcanum againſt the tape worm, for which the late Mr. Mathieu, apothecary, at Berlin, received an annual penſion from the preſent King of Pruſſia.

℞. *Limaturae ſtanni Angl. pur. unc. j. pulv. radic. filicis maris dr. vj. pulv. ſemin. Cynae unc. dimidiam, pulv. radic. Jalappae reſinoſae, Salis polychreſti ana dr. j. Miſc. fiat cum mellis communis ſufficiente quantitate electuarium.*

℞. *Pulver. rad. Jalapp. reſinos. Salis polychreſt. ana ſcrupul.* xij, *Scammonei Aleppenſis ſcrupul.* j. *Gummi guttae gran.* x. *Miſce fiat cum melle communi electuarium.*

1. In employing this remedy, it is neceſſary for the patient to keep, ſeveral days before, a frugal diet, and not to eat any ſalt meat, &c. but only broth and vegetables. 2. For the cure, a tea ſpoonful of the electuary is taken every two hours, which muſt be continued for two or three days, till the patient feels a ſenſation of the worm in the bowels. 3. He is now to take of the purgative electuary, likewiſe every two hours, a tea ſpoonful, till the worm goes off. If this ſhould not take place, ſome Caſtor oil may be given with it, or applied in clyſters. 4. Age, ſex, conſtitution of the patient, make an important difference in the application of this remedy, and its doſe, and it is therefore proper to try it under the care of an experienced phyſician. Finally, it remains to be obſerved, that the efficacy of this remedy depends in a great meaſure on the root of the fern, and particular care ought therefore to be taken, to employ the root of polypodium filix mas, which, when reduced to powder, is of a reddiſh colour.—*(Salzburg Medical Chirurgical Gazette*, in German, No. 39.)

A certain Dr. Lehnhardt, invented ſome time ago a ſalutary liquor for pregnant women, which he ſold as an arcanum, and recommended as an infallible remedy to prevent difficult labour.

It

It made a very great noiſe, and was highly praiſed by the inventor, in the ſtile of a quack; for which purpoſe ſeveral letters, addreſſed to the doctor and to the public, were publiſhed in ſundry German newſpapers, full of gratitude towards the inventor for his excellent remedy, and of praiſe of the liquor, as a moſt important diſcovery for the community. By the help of this liquor, women were ſaid to be ſafely delivered, without the application of any inſtrument, to which they had in former labours been obliged to have reſort; and, according to the reports, which were loudly ſpread, of the remedy, Juno Lucina ought to be in future repreſented with a bottle of Dr. Lehnhardt's liquor in her hand. It may be eaſily imagined, how favourably ſuch a beneficial remedy was received by the fair ſex; and, on the other ſide, how zealouſly the inventor was attacked by profeſſional men.

Of this famous liquor, a chemical analyſis had already been made by a Mr. Thorey, who found it to conſiſt of one ounce and 1½ drachm of Epſom ſalt, (magneſia vitriolata) of 1½ drachm of Tartarus vitriolatus, and of eight ounces of water. Prof. Manthey of Copenhagen, however, undertook, at the requeſt of an eminent practitioner, a new analyſis of it, which is publiſhed in Tromsdorf's Journal for Pharmacy, Vol. 8, No. 1, 1800, and differs in ſome reſpects from the former.—The liquor is ſold in white ſquare bottles ſealed, with a ticket, on which is printed in German, "Dr. Lehnhardt's new invented ſalubrious liquor for pregnant women." The colour is of a beautiful dark red, like red French wine; the taſte, a ſaline bitter, but not very diſagreeable; the ſmell, a little vinous; and at the bottom of the bottle, a mucilaginous dark-coloured precipitation is generally found. The contents of one bottle weigh about 13 ounces 6 ½ drachms. The reſults of the analyſis were, that it conſiſts of a ſolution of Epſom and Glauber's ſalt, that no vitriolated tartar is contained in it, and but a little muriate of magneſia, which frequently is preſent in the Epſom ſalt; that the colouring parts were extracted by ſpiritus vini. The ſynthetical experiments confirmed this analyſis, and a proportionable ſolution of Sal mirabile Glauberi and Epſom ſalt in water, coloured with a vinous tincture of lignum ſandalum, with the addition of ſome red wine, exhibited a liquor, which in every reſpect reſembled that of Dr. Lehnhardt, or in the following preſcription. R. *Aquae fontanæ Unc.* vij. *Sal. mirabil. Glauber. Unc. j.* drachms v. *Sal. Epſomens. Unc.* j. *Vin. rubri Unc.* iv.—What efficacy is to be expected from this famous liquor, after the knowledge of its conſtituent parts, may be eaſily judged.

Prof. Abildgaard of Copenhagen, writes in a letter to Prof. Blumenbach, that they have made there many experiments, by injecting medicines into the veins of horſes, by which means, he aſſures him, he has cured diſeaſes that are deemed either incurable or very ſlowly to be cured, and particularly the ſtaggers, within three or four days. They uſed for that purpoſe an infuſion of radix veratri albi, or the root of white hellebore, and it cauſed vehement

vehement motions in the ſtomach and bowels. In cows alſo, where medicines brought immediately into the ſtomach are of little or no uſe, this remedy proved very ſerviceable, without producing any ill conſequences. An infuſion of ſix grains of arnica, occaſioned in a horſe a perfect lameneſs, which laſted ſeveral hours. (*Voigt's Magazine for Natural Science, etc. Vol. I. No.* 7, 1800, *in German.*)

A new edition of the three former works of Dr. JENNER on Cow-pox is in the preſs, to which will be added a fourth, with a plate exhibiting, by means of drawings coloured from Nature, the vaccine puſtule through its progreſſive ſtages of inflammation, veſication, and ſcabbing; the latter will alſo be printed ſeparately, for the conveniency of thoſe who poſſeſs the three former.

Dr. MOSSMAN begs leave to inform the Editors of the Medical and Phyſical Journal, that for ſome time paſt he has had many opportunities of inveſtigating the nature of *Idiopathic Fever*, and has devoted much time to an enquiry into the comparative excellence of the different modes of cure. He is extremely diſſatisfied with the curative agents hitherto employed; and is now preparing for the preſs, "A Diſſertation on *Febrile Action*, incluſive of Strictures on the general treatment of *Fevers*, and an exhibition of powers radically and ſpecifically ſubverſive of thoſe morbid phænomena."

Mr. JOHN PULLEY, of Bedford, Member of the Royal College of Surgeons in London, intends ſoon to publiſh an Eſſay on the proximate Cauſe of Animal Impregnation; being the ſubſtance of a Paper read and diſcuſſed in the Medical Society at Guy's Hoſpital, in October 1799.

The Inſtitution for the Inoculation of the Vaccine Pock is removed from Warwick-ſtreet to a large and more convenient houſe, No. 5, in Golden-ſquare. Subſcribers of One Guinea per annum, are entitled to have two patients conſtantly on the books. Further particulars may be had of the Secretary, at the Inſtitution.

TO CORRESPONDENTS.

Communications are received from Dr. Adams, Meſſrs. Headly, Edlin, Swift, Ring, M'Garth, and D. F.

ERRATA.

Page 267, line the laſt, for *conceiving*, read *cenſuring*.

Page 275, line 38, inſtead of *were* now *given over*, read *were given over, &c.*

THE

Medical and Phyſical Journal.

VOL. V.] MAY, 1801. [NO. XXVII.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IT will perhaps be thought unneceſſary at this period, when the world is already furniſhed with ſuch abundant evidence of the ſafety of the Vaccine Inoculation, and its efficacy in protecting the human conſtitution againſt the Small-pox, to advance any thing further on the ſubject; but having lately ſeen in the public papers ſome letters, tending to excite alarm among thoſe who have adopted the new ſyſtem of inoculation, I could not refrain from offering a few words, with a hope that they may allay any unpleaſant ſenſations ariſing from this ſource.

Since the month of December, 1799, I have inoculated nearly three thouſand perſons for the Cow-pox, a very great number of whom have ſince been expoſed to the contagion of the Small-pox, in every way that can be imagined, without its producing the ſmalleſt effect. To place this in a point of view, at once ſtriking and within the reach of inquiry, I ſhall mention an inoculation which took place at a village in Wiltſhire, *Burbage*, near the ſeat of the Earl of Aileſbury. Being there on a viſit laſt ſpring, I gave a general invitation to people of all deſcriptions to come and be inoculated. My offer was accepted by men, women and children, to the amount of ſix hundred, who went through the Cow-pox in the uſual mild way. Some months afterwards the village was viſited by the Small-pox, which made dreadful havoc among many of thoſe who did not avail themſelves of my invitation, while thoſe who accepted it remained ſecure, although there was a general intercourſe between them during the whole period. Facts equally ſtrong have been tranſmitted to me by a letter from my very particular friend, the Rev. Mr. Clinch, of Trinity, in Newfoundland, of which the following is an extract:

"The threads you ſent me produced the deſired effect, which proved a happy circumſtance for this harbour. After inoculating my own family, I availed myſelf of the opportunity, whilſt the Small-pox was making its ravages at St. John's, of viſiting

that place. Encouraged by your repreſentation, and in order to eſtabliſh the fact of the Cow-pox being an abſolute preventive of the Small-pox, I put my nephew (Joſeph Hart) to the moſt rigid teſt, by inoculating him with active variolous matter, and expoſing him to a contagious atmoſphere, but without its producing in either inſtance the ſmalleſt effect on the ſyſtem. This ſingle caſe excited the aſtoniſhment of every perſon within whoſe knowledge it came; and moſt of thoſe who had not previouſly gone through the Small-pox, were eager to ſhield themſelves againſt that dreadful malady by adopting the Vaccine Inoculation. Juſt before my arrival at St. John's, a woman was inoculated for the Small-pox, and, four days afterwards, her infant at the breaſt, with the Vaccine. Both went through the reſpective diſeaſes in the uſual way, and perfectly diſtinct from each other, although the mother continued to ſuckle her child the whole time. Shortly after my return to this place, the Small-pox was imported in a veſſel from Quebec; one of her crew died of it. Fortunately for the inhabitants of Trinity, moſt of them had been inoculated with the Cow-pox, and were thereby prepared to reſiſt the influence of the Small-pox. Several of my Cow-pox patients attended this man during his illneſs, but eſcaped the infection of his diſeaſe.

"It gives me great pleaſure to ſay that the Jennerian Inoculation is extending itſelf faſt over this iſland; but one thing I lament is, the great probability of many errors being committed by perſons ignorant of the diſeaſe, and inexperienced in the practice of inoculation; for the people of Newfoundland are indiſcriminately inoculating each other, and I fear ſome of them may either not receive the infection at all, or by taking the virus at too late a period (a circumſtance you ſo particularly cautioned me againſt) create a ſpurious diſeaſe; and thus, under an ideal ſecurity, expoſe themſelves to variolous contagion, when, in fact, they have never had the ſpecific preventive. I muſt add that we are much indebted to the zeal and exertions of Mr. Macurdy, ſurgeon, of St. John's, for the rapid progreſs the Vaccine Inoculation has made in Newfoundland. Mr. Macurdy, I underſtand, received his virus from Dr. Jenner, through the medium of our worthy and reſpected Governor, Admiral Pole."

Having in my own extenſive inoculation ſeen the vaccine puſtule in all the varieties it aſſumes, I conſider it as a duty I owe to humanity and ſociety to anſwer any enquiries that may be made on the ſubject; and if the reſult of my information ſhould contribute to relieve the anxiety of a parent for the ſafety of a child, or remove the pain of ſuſpence, I ſhall feel myſelf highly gratified. I am, &c.

G. C. JENNER.

No. 13, *Bond Street*,
April 22, 1801.

An extraordinary Case of Small-Pox, by THOMAS PURTON, *Member of the Royal College of Surgeons in London.*

To the EDITORS of the MEDICAL and PHYSICAL JOURNAL.

Gentlemen,

IT has been so generally considered as a fact, that a person once infected with the small-pox is safe from having it a second time, that I feel a considerable degree of diffidence in sending you the following statement of a case, by which it is indisputably proved, that it is *possible* for the variolous infection to take place a *second time* in the *same person*, and that *even* in the *natural way*.

My partner, Mr. Bloxam, a gentleman of sound judgment, who has been established forty years in a very extensive business, and who visited the patient with me through every stage of the disease, has not a doubt of the nature of the case; nor should I have troubled you on the present occasion, if my mind had not been thoroughly convinced of its accuracy.

I have been told by an elderly lady of respectability, that she knew a person who certainly had had the small-pox twice; and her statement was so very accurate and circumstantial, that it was sufficient to stagger the firmest sceptic; but I confess that my opinion remained unchanged until the following case came under *my own* observation.

The circumstance of a person having the small-pox a second time, *from its rarity*, must be considered as a singular phœnomenon in pathology; therefore, I cannot perceive in what way (even if it was generally known) it can injure the cause of variolous inoculation; but it decisively proves that the small-pox may in a few rare cases be received twice by the same person, and therefore it ought to be known; and this case deserves more particular attention, because the subject of it was not inoculated for the small-pox, but received the disease in the casual way on both occasions. In the first attack, her mother caught the disease from her, and narrowly escaped with her life. The last time I saw her myself; and any person who has doubts, may be satisfied by inoculating with some of the matter, which I have preserved.

This case is farther entitled to notice, because no greater security against the small-pox can be expected from the Vaccine Inoculation than from the infection of the natural small-pox; therefore the preference of the cow-pox would not be invalid-

ated by the occurrence of an occasional case, in which the small-pox might be caught after inoculation for the cow-pock, if such an instance should arise.

The subject of the present case is Maria Hunt, of Exhall, near this town, *aged twenty-two years*; she caught the small-pox when she was *five months old*, and had them very violent, as the marks at this time sufficiently testify.—Her mother caught the disease of her, and had it to so alarming a degree, that the apothecary who attended, had scarcely a hope of her recovery.—The mother is still living, from whom I received this account, which was also corroborated by the testimony of many respectable neighbours.

On the 11th of March last, the whole village of Exhall was inoculated with variolous matter, and this young woman was appointed one of the nurses.—On the 3d of April, she was attacked with severe rigors, pain in the head and back, sickness, and other usual symptoms of an approaching fever.—The two following days she was extremely ill, the fever increased to an alarming height, attended with delirium, through most part of the night previous to the appearance of the eruption, which shewed itself on the 6th of April, early in the morning. The eruption continued to increase for several days; her throat became sore, with a sense of fullness, from the number of pustules covering the fauces; and they continued filling till they were completely maturated.—About the 9th day from the appearance of the eruption, those upon her face began to turn, and in a few days after, those upon the rest of her body.

I never thought of taking any matter till the thinner contents of the pustules were nearly absorbed; but, however, I have obtained a very sufficient quantity, part of which I will send to you, or any gentleman who wishes for farther confirmation, to make trial of it.

The above is a just detail of this extraordinary case, which I leave to medical men to make their own comments upon.

I am, &c.

Alcester, April 17, 1801. T. PURTON.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I Live in a remote part of the country, where access to libraries, either public or private, is not very frequent; and the price, the shameless price, of new books now driving them out

out of the reach of ordinary purſes, I have been obliged for years paſt to ſatisfy my literary curioſity chiefly with Reviews, Journals, and the like, which I fear, for the ſame reaſon, will ſoon be out of my reach too. A year or two ago I ſaw Speculations on Generation mentioned in the Reviews with ſome praiſe; and as the book was ſaid to overthrow the generally received theory, and to point out a new one, and as the price did not put it out of my reach, I purchaſed a copy of it. It was written by a Dr. Couper; and though I receive the ſtatements and conjectures of medical men with much heſitation and allowance, the Doctor's ingenuity, at leaſt, muſt be admitted. He ſets off with a furious attack on the long eſtabliſhed theory; and I cannot help going along with ſome of the Reviewers, who unequivocally admit his complete ſucceſs in overthrowing it; and he muſt be a hardy writer or Profeſſor, indeed, who, after ſuch an elucidation, will perſevere in promulgating the old doctrines.

With reſpect to the new idea of generation, which Doctor Couper has thrown out, but which, to do him juſtice, he does not affect to have by any means eſtabliſhed, it wears as plauſible a face as moſt theories; and, as he ſays, may in time, and in better hands, be as well worth the acknowledging as the beſt of them. He alleges, that the ſemen is abſorbed by the vagina, which is peculiarly conſtructed for this very purpoſe; that it is thus thrown into the general circulation, impregnating the whole maſs; the reſult of which, like other functions for other ends, is determined to the ovaria. This he conſiders probable from the powerful effects of the ſemen reſorbed by the male; from its effects on the female when impregnation does not take place, as well as when it has taken place; and from a multitude of appearances and circumſtances which I ſhall not occupy more of your room with; but which, whether the theory be followed up and become uſeleſs, or whether it ſhall ſink into obſcurity, like many a theory before it, will evince no little attention and ingenuity in the author.

Why I have taken upon me to mention this book in your uſeful work is, neither to attack nor defend it, but merely to obſerve that, ſince its publication, I have ſeen and heard of different theories of generation, the authors of which would not have been loſers by a peruſal of it.

I am, your's, &c.

AMICUS.

T.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE following are the Cafes I promiſed in the laſt Number:

JAMES RICE, aged 18, was admitted the 31ſt of May, 1800; he had great fever, cough troubleſome, breath very ſhort; I gave him, viz. ℞. pulv. ipecac. ℈j. s. s. oxy. ſcillæ, ʒj. capt. coch. j. parv. ſæpe urgenti tuſſe, infus. amar. ℔. j. capt. poculo bis die. I was taken ill myſelf this day, therefore ſaw him no more for ſeveral weeks, as my buſineſs was turned over to another perſon until I was well; but, upon ſtrict enquiry afterwards, I found he began to ſwell from that time in his legs, abdomen, &c. with great pain, and little or no urine; every ſymptom ſeemed gradually to increaſe, until he was ſuppoſed to be in a dying ſtate, therefore the medical attendance was deſiſted from until the 25th of July, when his mother applied to me again. I found him with a general dropſy, and very much emaciated; the ſtomach, abdomen, and lower extremities extremely diſtended; the penis and ſcrotum in proportion; could reſt only in an erect poſition, making only a tea cup full of turbid urine in twenty-four hours. I then gave him, ℞. Pulv. fol. digital. g. j. pulv. aromat. g. iv. pulv. glycirrh. g. xv. ft. pulv. capt. j. ter die. 26th. I found a diarrhœa had came on in the morning, and he felt himſelf extremely weak; I gave him opii. g. jſs. and punctured the penis and ſcrotum. 28th. Symptoms nearly the ſame; rept. pulv. digital. ut antea. Aug. 1ſt. The diarrhœa ſtill continues; had ſome intervals of ſleep, makes rather more urine, the penis and ſcrotum quite evacuated; Rept. pulv. digital. cum opio. j. ¼, in ſing. ch. 2d. Has had ſome ſleep in the night, and much freer from pain; the diarrhœa moderated, makes a pint of urine in twenty-four hours; Rept. pulv. digital. e opii ut antea. 5th. Much eaſier, makes more urine, the cough troubleſome; Rept. pulv. ut ultimo. 8th. Diarrhœa abated, cough leſs, the ſwellings generally abated, makes two pints of urine in twenty-four hours; Rept. pulv. ut ultimo. 11th. Every ſymptom much abated, urine plentiful, was able to lie down and have ſome refreſhing ſleep, walked out a little; Rept. pulv. ut ultimo et poculo decoct. cinchonæ bis die. 15th. Continued much better, left off his powders gradually, and continued the decoct. cinchonæ until the 18th of Auguſt, when he was diſcharged perfectly cured.

ELIZ. REYNOLDS, aged 50, was admitted Auguſt 15, 1800, with

with anasarca and ascites, and had been long ill with cough and other hectic symptoms, also very much in pain; made very little urine; breath very short. I gave her pulv. digital. e opii ut (Rice) ter die. 16th. Nearly the same. 18th. Rather more urine; Rept. pulv. ut antea. 19th. Ditto. 20th. Very much in pain; R. Gamb. g. iij. crem. tart. ʒj. M. ft. et divid. in dosæ ij. capt. j. statim et rept. h. s. si. opus fuerit. 21st. Both powders were taken, but produced no effect; vomited water at times; R. Pulv. scillæ g. vj. opii g. iij. cons. q. s. ft. pil. No. vj. capt. j. 4tis horis. 22d. Had taken all the pills, but no effect; pain and sickness still continue, rather more urine, the abdomen, &c. very much distended, breath very short; gave her infus. digital. ʒviiss. spirit. æth. nitrosæ ʒss. tinct. opii gt. 60, ft. mist. capt. coch. ij. ampla 4tis horis. 23d. Every symptom the same. I performed paracentesis, and drawed off twenty-three pints of water, and she died the next day.

Sarah Richards, aged 36, was admitted October 16, 1801, with anasarca and ascites, and general marks of debility, and had lately lain-in; urine very scanty. I gave her, R. Pulv. digital. gr. j. pulv. aromat. g. iv. pulv. glycerrh. g. xv. ft. pulv. ter die sum. 18th. Nearly the same; Rept. pulv. ut antea. 20th. Ditto; R. pulv. scillæ calomel pp. aa. g. vi. cons. q. s. ft. pil. No. iv. h. s. s. 22d. Had some watery stools; swellings rather loosened, and makes rather more urine. 25. Legs less swelled, and makes more urine. 27. Ditto. 31. Ditto. Rep. pil. calomel et scillæ h. s. s. Nov. 1. Continues mending; had several watery stools; and made more urine; swelling considerably decreased. 3. A diarrhœa came on; swelling of the legs much less, urine plentiful. Repet. pulv. ut antea bis die, et poculo decoct. cinchonæ bis die. 6. Swelling nearly gone. Rep. pulv. et decoct. 12. Continued mending, and the 20th was discharged cured.

Esther Shalswell, aged 55, was admitted October 23, 1800, with anasarca; legs much swelled, and in pain, with some degree of inflammation. I gave her R. Pulv. digital. &c. ut (Richards). 24th. Nearly the same; Rept. pulv. ut antea. 27th. The skin rather looser; made rather more urine. 29th. A diarrhœa came on, and made more urine; Rept. pulv. ut antea. 31st. Swelling much less, makes plentiful urine. Nov. 1st. Ditto. 3d. Ditto. 12th. Swelling quite gone; gave her decoct. cinchonæ, and was discharged the 15th cured.

William Turner, aged 84, was admitted July 26, 1800, with hydrothorax, &c. Of a spare habit of body, had not lain down in bed for above seven years, always sat perfectly erect in his chair; legs much swelled, breath short, dry cough, urine very scanty; gave him Pulv. digital, &c. ut (Richards) ter die.

28th.

28th. Rather more urine. 30th. Ditto. Auguſt 1ſt. Rather coſtive; ℞. Pulv. crem. tart. g. x. pulv. jalap ℈j. ft. pulv. s. s. 4th. More open, and rather more urine; Rept. pulv. digital. ut ult. 5th. Symptoms nearly the ſame; Rept. pulv. cath. ut antea. 6th. A diarrhœa came on in the evening; he went up ſtairs to call his wife, ſat himſelf down on the foot of the bed at eleven o'clock, fell faſt aſleep, and fell backwards on the bed, and ſlept quietly until three the next morning, when he awoke frightened. 8th. Continued open, made conſiderable quantity of water; Rept. pulv. ut antea. 12th. Diarrhœa continued very troubleſome, but made plentiful urine; ℞. Pulv. creta. comp. e opii ℈j. ft. pulv. ter die. 14th. Swelling much leſs, griping troubleſome; ℞. Pulv. rhab. ℈j. ft. pulv. s. s. Rept. pulv. digital. ut antea; urine plentiful. 18th. Swelling much leſs, cough and other ſymptoms much abated; Rept. pulv. rhab. et pulv. digital. ut antea. He went to bed regularly, and ſlept well. 22d. Pain and griping troubleſome, gave him ℞. opii crud. g. ij. acid. nitros ʒij. aq. font. ℥ij. ſt. gutt. capt. coch. j. parv. 4tis horis. 27th. Every ſymptom much abated. urine plentiful; Rept. pulv. digital. ut antea cum infus. amar. until the 1ſt of September, when he was diſcharged cured.

Ann Rice, (mother to James Rice) aged 56, was admitted Jan. 3, 1801, with anaſarca and aſcites; makes a pint of water in twenty-four hours; dry cough, breath ſhort. ℞. Pil. ſcillæ cum calomel et pulv. digital. &c. ut (Richards). 5. Had ſome watery ſtools; other ſymptoms nearly the ſame. ℞. Pulv. jalap ℈j. crem tart. g. x. ft. pulv. s. s. 6. Nearly the ſame. Rep. pulv. digital ut antea. 9. Ditto. 12. Swelling much leſs, urine plentiful. Rep. pulv. digital. ut antea et decoct. cinch. bis die. 20. Continued the digital. et cinch. until the 30th, and was diſcharged cured.

Hannah Morress, aged 46, was admitted Jan. 20, 1801, with aſcites, the abdomen much ſwelled, and greatly in pain; urine ſcanty. ℞. Pil. ſcillæ et calomel ut (Richards) et pulv. digital. &c. ter die. 22. Had ſeveral looſe ſtools, made rather more urine. Rep. pulv. digital. et infus. amar. 24. Urine more plentiful, cough troubleſome. 27. Symptoms much abated. Rep. pulv. et infus. alſo oxy. ſcillæ capt. coch. j. min. ſæpe urgenti tuſſe. Feb. 3. Every ſymptom much abated; urine plentiful. Continued the digital. et infus. amar. until the 20th, and was diſcharged cured.

John Williams, aged 58, was admitted Jan. 23, 1801, with cough, diſpnœa, and ſwelling of the abdomen; urine ſcanty, and much fever. ℞. Pulv. jalap ℈j. crem. tart. gt. x. ft. pulv. s. s. oxy. ſcil. ʒj. cap. coch. min. ſæpe, pulv. feb. nitroſæ,

troſæ, 4tis horis. 24th. Had one ſtool, cough ſtill troublesome, legs ſwelled, breath very ſhort, urine ſcanty. R. Pil. ſcillæ et calomel ut (Richards); rep. oxy. ſcillæ et pulv. febnitroſæ. 26 Symptoms nearly the ſame; rep. pil. ſcillæ et calomel. 31. Had ſome watery ſtools; breath rather better, fever rather leſs, cough at night troubleſome. R. Pil. ſapon. g. x. omni nocte ſum. pulv. digital. et infus. amar. (Richards). Feb. 3. Cough continues troubleſome. Rep. pulv. digital. &c. et infus. amar. Swelling of the abdomen ſtill continues, urine ſcanty. 7. Increaſed the digitalis to four grains a day. 9, 12, Took digitalis ſix grains a day until the 22d, with relief, when I gave him Crem. tart. mellis aa. ℥jſs. ft. elect. cap. 3tiam partem omni die. He continued the uſe of this electuary with tonics until March 30, when he was diſcharged cured.

Sarah Holliday, aged 21, was admitted Jan. 24, 1801, with general dropſy; had been out-patient to an hoſpital for ſeveral weeks, but without relief; has been in this ſtate three months; makes only three-quarters of a pint of water in 24 hours; obliged to ſit perfectly erect; has not lain down in bed for ſome time; her legs greatly ſwelled. R. Pil. ſcillæ et calomel ut (Richards) et pulv. digital. &c. ter die. 27. Has had two ſtools; ſwelling rather leſs in her arms; has made rather more urine. Rep. pulv. digital. ut antea. 31. Nearly the ſame. Rep. pulv. digital. &c. et infus. amar. Feb. 3. Ditto. Rep. pulv. ut antea. 6th. Legs more ſwelled; punctured the legs and gave her decoct. cinchonæ. 14th. Legs no leſs; increaſed the digitalis until the 20th without effect, but found her much worſe, and ſuppoſed almoſt in a dying ſtate. I then gave her, R. Crem. tart. mellis aa. ℥iſs. ft. elect. ut antea ſum. 22d. Found her rather eaſier, a little more urine; Rept. elect. ut antea, capt. dimid. o. die. 24th. Found her much eaſier, ſwellings much leſs, makes more urine. 26th. Still better; Rept. elect. diuret. ut antea. The urine continued to come freely; ſhe continued the electuary and decoct. cinchonæ until March 28, when ſhe was diſcharged cured.

William Davis, aged 58, was admitted Jan. 24, 1801; had been ill for two months with peripneumonia, and violent pain in the epigaſtric region; and now the abdomen began to ſwell. R. Pil. calomel et ſcillæ ut (Richards), et pulv. digital. &c. bis die. 26th. Urine ſcanty, and much in pain; had two looſe ſtools; Rept. pulv. digital. &c. ter die, and crem. tart. diſſolved in boiling water for common drink. 29th. Nearly the ſame; Rept. pulv. digital. ut antea 4tis de die. 31. Swelling ſtill continues, with much ſickneſs; R. Infuſ. digital. ℥viiſs. ſpirit. æth. nitroſæ ℥ſs. ft. miſt. capt. coch. iij. ampt. 4tis horis. Feb. 2d. Urine ſmall, pain continues, ſickneſs

continues; Rept. mist. ut antea. 3d. Nearly the same; Rept. mist. adde conf. arom. ʒij. 4th. Sickness rather abated. 5th. Nearly the same; Rept. mist. ut ultimo. 6th. He died.

JOHN HORNER, aged 58, was admitted Jan. 30, 1801, with general dropsy; had been a patient in the Hospital thirteen weeks without relief; had not lain down in his bed for three weeks, was obliged to sit perfectly erect, breath extremely short, makes one pint of urine in twenty-four hours; ℞ Pil. calomel et scillæ ut (Richards) et pulv. digital. &c. bis die. 31st. Had one costive stool; urine the same. Rept. pil. Feb. 2d. Very much in pain; Rept. pil. ut antea. 4th. Had two costive stools, urine the same, pain the same; ℞. Pulv. jalap ℈j. pulv. crem. tart. g. x. ft. pulv. s. s. Rept. pulv. ut antea ter die. 5th. Nearly the same; ℞. Infus. digital. ʒviiss. spirit. æth. nitrosæ ʒss. ft. mist. capt. coch. iij. amp. 4tis horis. 6th. He died.

WILLIAM MANN, aged 32, was admitted Dec. 9, 1800; had been ill a long time with phthisis pulmonalis. Took tinct. digitalis et infus. amar. and was discharged, Jan. 22d, cured. Has since been ill again, with cough, breath short, and great expectoration of purulent matter; and still remains the same under my care.

RICHARD BATTING, aged 60, was admitted Dec. 9, 1800, with asthma, dry cough, and breath extremely short. Took tinct. digitalis cum infus. amar. by increased doses, until Jan. 2, when he was discharged cured.

SARAH RAXWORTHY, aged 55, was admitted Jan. 9, 1801, with long standing asthma, breath short, cough troublesome; took tinct. digital. et infus. amar. by increased doses for six weeks, then placed under another person's care, and died soon afterwards.

WILLIAM SHEPHERD, aged 80, was admitted Jan. 1, 1801, with long continued asthma, but now unable to lie down in bed, with every symptom of hydrothorax and anasarca beginning; took tinct. digital. et infus. amar. and was discharged, Feb. 14, cured. Was admitted again a month afterwards, and died suddenly.

GRIFFITHS LOYD, aged 75, was admitted Jan. 17, 1801; has had asthma for many years; his legs now begin to swell, and urine scanty; took tinct. digital. by increased doses, and was discharged, March 2, cured.

ANN RAMSEY, aged 40, was admitted Jan. 27, 1801, with consumption; no rest at night, and continued diarrhœa. ℞. Opii. g. ʒ. c. n. et tinct. digital. She died Feb. 28.

MARY MELSOME, aged 53, was admitted Feb. 3, 1801; has had asthma for twenty years; has been worse two weeks; legs

legs swell, urine scanty; took tinct. digital. at increased doses, and was discharged, March 20, greatly relieved.

HESTER BROWNING, aged 50, admitted Feb. 3, 1801; has had asthma for three years, breath now extremely short, expectoration much, legs much swelled, makes ℔ss. of water in twenty-four hours. Took digitalis by increased doses for a month without relief; I then gave her, ℞. Cream. tart. mellis aa. ʒiss. ft. elect. which she continued until the 24th of March, when she was discharged cured.

A great many other cases of the like kind I could insert, if my time would permit; but I hope this will be sufficient to show that Digitalis cannot, *at all times*, be depended on. I here meant only to state the clear cases under my own immediate attention; I do not presume, as a junior practitioner, to throw any new light on practice or diseases, but merely to state cases, and leave my elders to judge of them.

I am, &c.

Dispensary House, North Street, April 10, 1801.

W. D. ROLFE.

State of the Patients in the Bristol Dispensary, from the 1st of March to the 1st of April, 1801.

Typhus Fever	44	Consumptions	8
Stomach Complaints	8	Podagra	1
Continued Fever	17	Hæmiplegia	1
Asthma	2	Scorbutic, &c.	3
Peripneumonia	5	Tabes Dorsalis	1
Dropsy	9	Pleuritic	2
Worms	3	Asthenia	1
Cough and Dyspnœa	3	Convulsio	1
Rheumatism	3	Hæmoptoe	2
Ophthalmia	1	Uterine Hæmorrhage	2
Bowel Complaint	7	Hysteria	1
Puerperal Fever	1		

Account of Diseases in an Eastern District of London, from the 20th of March to the 20th of April, 1801.

ACUTE DISEASES.	No. of Cases.	CHRONIC DISEASES.	No. of Cases.
Typhus	25	Cough	23
Pneumonia	3	Dyspnœa	12
Febris Hectica	1	Cough and Dyspnœa	13
Ophthalmia	2	Catarrhus Senilis	2
Apoplexy	1	Phthisis Pulmonalis	10

Pertuſſis	1	Aſthenia	3
Hydrothorax	2	Lumbago	1
Aſcites	1	Sciatica	2
Anaſarca	3	Cynanche Parotidœa	3
Cephalœa	6	Rheumatiſmus Odontalgicus	4
Hemicrania	1	Rheumatiſmus Chronicus	10
Vertigo	6	PUERPERAL DISEASES.	
Paralyſis	1	Menorrhagia Lochialis	4
Hepatitis Chronica	3	Lactea	2
Diarrhœa	20	Dolores Poſt Partum	3
Dyſenteria	3	Abſceſſus Mammæ	1
Enterodynia	3	INFANTILE DISEASES.	
Gaſtrodynia	2	Convulſio	2
Nephritis	1	Vermes	3
Dyſuria	2	Febris Infantilis	1
Fluor Albus	6	Diarrhœa	4
Amenorrhœa	4	Pertuſſis	1
Chloroſis	5		

The diſeaſe which has ſo long engaged the attention of the medical practitioner, and which has been conſidered as the reigning epidemic, ſtill continues in a conſiderable degree to prevail. The number of patients affected by this fever has within the laſt few weeks, rather increaſed than diminiſhed. Affections of the head, which have been repeatedly referred to, as a common ſymptom in typhus, but as prevailing in a peculiar degree in the late fever, ſtill continues as a prominent feature of the diſeaſe. Pain in the head, coma, or delirium, have been protracted longer than uſual, and have even continued after other febrile ſymptoms have abated. Complaints of the head have indeed lately occurred in a great number of caſes, as an idiopathic diſeaſe. Violent pains, confuſion of ideas, and vertigo, have been frequently complained of, where no ſymptoms of fever could be diſcovered; and vertiginous affections have in ſeveral inſtances approached very nearly to an apoplexy.

The north-eaſterly winds which blew a few weeks ago, were productive of different complaints in the face and jaws. Slight Ophthalmiæ alſo have been experienced by perſons who had been for a conſiderable time expoſed to their influence. The diſeaſe denominated by noſologiſts Cynanche Parotidœa, and vulgarly called the Mumps, has alſo been frequently troubleſome, and may probably be attributed to a ſimilar cauſe. Rheumatic pains of the face and teeth, termed Rheumatiſmus Odontalgicus, have alſo occurred in ſeveral inſtances.

MONTHLY

MONTHLY REPORT of DISEASES,

Admitted under the Care of the PHYSICIANS of the FINSBURY DISPENSARY, St. John's Square, Clerkenwell.

From March 20, to April 20, 1801.

	No. of Cafes.		No. of Cafes.
Chlorofis and Amenorrhœa	26	Infantile Diſeaſes	33
Menorrhagia	4	Anaſarca	3
Diarrhœa	11	Cephalæa	5
Tuſſis and Dyſpnœa	39	Epilepſy	3
Phthiſis Pulmonalis	9	Hyſteria	4
Cynanche Tonſillarum	2	Aſthenia	28
Eryſipelas	10	Hypochondriaſis and Dyſpepſia	19
Continued Fever	31		
Chronic Eruptions	29		

At this ſeaſon of the year, ſcrophulous affections are more particularly apt to ſhew themſelves, in habits which have any tendency to the diſeaſe. A circumſtance that may ſeem to oppoſe an opinion that has ariſen, and in ſome meaſure is ſupported by the obſervation, that theſe complaints prevail more particularly in the northern regions of the world. It ſhould, however, be conſidered, that the winter's cold, which has been gradually operating, cannot have produced its *full* effect upon the conſtitution until the commencement of the ſpring. The *anti-vital* principles of cold cannot fail to produce debility, and all its numerous offspring of diſeaſes.

In the more northern parts of this iſland, few families, comparatively, are altogether free from ſcrophulous contamination. Even in this metropolis, inſtances not unfrequently are found in which the diſeaſe appears, accompanied with all its dangerous and diſagreeable ſymptoms.

A conſiderable number of theſe has fallen within the diſtrict of the Finſbury Inſtitution.

Sometimes this complaint ſhews itſelf in inflammation and ulceration on the edges of the eye-lids, which is apt to occaſion an entire, or partial, loſs of the laſhes, and in conſequence of being communicated to the eye itſelf, frequently renders the exerciſe of that organ, not only painful and inconvenient to the patient, but ſometimes, by inducing blindneſs, deprives him entirely of its uſe.

Scrophula, in many caſes, aſſumes the form of phthiſis, which indeed may in general be regarded as an *internal* ſcrophula.

Frequently this complaint ſhews its malignant efficacy in producing ulcers and indolent tumours in various parts of the body, leaving indelible traces, diſfiguring the form, impairing the

the easy and vigorous motions of the limbs, and inducing a variety of diseases, in which, if not altogether incurable, the patient has seldom any thing to hope but from submitting himself to the certain pain, and risking the precarious result of a surgical operation.

By far the most frequent shape in which the disease has subjected itself to the observation of the Reporter, is an obstruction in the mesenteric glands. All the persons affected with the tabes mesenterica were young children.

Of the cases of scrophula, indeed, few have occurred amongst adults; a circumstance which, in the class of the extremely poor in London, may in part arise from their too seldom being able to provide for their puny and diseased offspring, even a scanty and occasional supply of that nourishing and strengthening diet, peculiarly requisite for the support of a scrophulous constitution.

In the treatment of scrophula, the writer of this article prescribed cleanliness, exercise, cold bathing, and as much of substantial food as the circumstances of the patient, or those of his family, would enable him conveniently to procure.

As one of the best correctors of a relaxed and debilitated habit, port wine was in some instances strongly recommended; but the expence of this article rendering it at present almost inaccessible to the greater part of Dispensary-patients, it was in general found necessary to substitute the Peruvian or some other of the barks that are made use of in medicine.

The multitude of general remedies that have been proposed for the treatment of scrophula, demonstrate the difficulty of accomplishing a cure. Each has, in its turn, been at one time warmly applauded, and eagerly received; at another, as bitterly reprobated, and as generally rejected. Millepedes and burnt sponge, antimony and mercury, sassafras and mezereum, tussilago and cicuta, have successively had their career of triumph, and their days of disgrace; nor is it too bold to prognosticate, that the period will arrive when they will share the fate of many other remedies which have now sunk into neglect, and which repose in the same peaceful oblivion with the ashes of their authors. Tonic remedies, indeed, have inherited, and seem likely to enjoy, a more permanent reputation. Instead of requiring correction, Nature, in the disease at present under consideration, seems to be more in need of our friendly support and assistance. The internal remedies, from which the greatest success may be expected, are, the Peruvian bark, already mentioned, with the various preparations of steel, in conjunction, perhaps, with gently stimulating aperients, the muriated tincture of iron, in doses of from five to ten drops, poured from

from a two-ounce vial, three times a day, has been given with signal advantage in a variety of scrophulous affections.

The barytic muriate has of late been proposed by Dr. Crawford, and appears, from the testimonies of many respectable authorities, to be well deserving of further attention. But it is necessary to caution the practitioner, who may be induced to give it a trial, against the admixture of noxious metals, with which the barytic solution is sometimes contaminated. Its impurity may be always detected by the addition of a small quantity of barytic lime-water. The dose should be carefully regulated, and gradually increased, lest it produce symptoms of nervous affection. It may be useful to remark, that twenty drops at a time is as much as an adult can bear with impunity.

The remedy which seemed to have the most striking, and the only one perhaps that had a permanent effect in alleviating the symptoms, or in abridging the period of the disorder, was a temporary residence at the sea-side. This afforded an opportunity to the patient of experiencing at once the salubrious influence of the elements, both of which have been found eminently conducive to the ease or the relief of scrophulas, as well as all diseases which have their source in physical debility.

One of the most decided and obstinate cases of scrophulous affections, which was alluded to in one of the preceding Reports, in which the patient suffered alternately from a sore in her breast, and a violent pain in her head; her complaint had been of long standing, and had not in the slightest degree yielded to the remedies which had been administered to her before her application for relief to the Finsbury Dispensary. She seemed, for a time, to be relieved by the Cort. Peruv. taken regularly in frequent and considerable doses.

After a trial of some weeks the case continued to be imperfect. It was thought right to recommend, as the only chance that remained of a perfect restoration to her former health and vigour, to settle, during a considerable period of the summer, on the sea-coast. In consequence of a faithful obedience to this advice, her constitution seems since to be in a great measure regenerated, and the affections, which before were so troublesome to her, entirely removed.

The preceding observations, with regard to the salutary efficacy of sea-bathing, ought to be qualified by the exception of its use, in those instances where there is any morbid affection of the lungs.

In these cases, the sea generally aggravates the sufferings of the patient, and accelerates the termination of his life.

How large a number of the deaths we see inserted in the public papers is that of those which have occurred at sea-bathing-

ing-places, where it is generally obſerved, that the deceaſed had gone for the benefit of his health.

The more than ordinary expedition with which Death executes his deſtined taſk in theſe faſhionable reſorts of gaiety and ſickneſs, is ſtrikingly exhibited to our view in their crowded records of mortality.

The authentic and melancholy enumeration of the victims to untimely fate, one ſhould imagine, could ſcarcely fail to awaken a gloomy preſentiment in the mind, that in ſome meaſure tends to counteract the diſpoſition to hope, ſo eaſily imbibed and ſo anxiouſly cheriſhed by the multitude of conſumptive invalids, who, on the approach of each returning ſummer, haſten with eagerneſs to the coaſt, fondly expecting to find, amidſt the breezes of the ocean, that relief which, elſewhere, had been ſought for in vain.

Red Lion Square. J. R.

Diſeaſes admitted under the care of the Phyſicians of the Weſtminſter Hoſpital, from the 25th of March to the 27th of April, 1801.

	No. of Caſes.		No. of Caſes
Continued Fever	8	Hæmorrhois	1
Intermittent	1	Impetigo	3
Otitis	1	Iſchuria	1
Pleuritis	2	Leucorrhœa	2
Cynanche	1	Menorrhagia	1
Anaſarca	4	Obſtipatio	1
Aſcites	1	Paralyſis	2
Aſthenia	3	Phthiſis	2
Aſthma	1	Prolapſus	1
Catarrh	3	Rheumatiſm	11
Chloroſis	1	Struma	3
Diarrhœa	2	Syphilis	1
Dyſpepſia	2	Tuſſis	8
Dyſpnœa	1	Urticaria	1
Enterodynia	1	Vermes	2
Gaſtrodynia	2	Vertigo	1
Hæmoptœ	3		

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

A Printed paper was put into my hands a few days ago, ſubſcribed D. WHITEHEAD, No. 16, Charlotte-ſtreet, Bloomsbury, recommending a revival of the old remedy for the Gout, known by the name of the Portland Powder, which is here ſaid to be improved, and is exhibited in the form of an expenſive and lucrative noſtrum.

As the effects of this preparation have long been recognized by profeſſional perſons as injurious and miſchievous, and as the authorities cited in the paper which recommends it, are much miſrepreſented and perverted, I wiſh to lay before the public what I apprehend to be the true ſtate of the caſe, and to caution mankind againſt the trial of a remedy at once ſo deceitful and ſo dangerous. From what is ſaid in the paper above alluded to, we ſhould be led to believe that this remedy was purchaſed and diſperſed by the preſent* Duke of Portland; whereas, it was by his father, many years ago. The preſent nobleman owes his amendment, and indeed his recovery from this painful complaint, to a meritorious and ſteady adherence to an abſtemious and regular courſe of diet, which conſiſts nearly of vegetable ſubſtances; the mixture of animal food being very ſmall, and that of the mildeſt kind: to this is joined a total abſtinence from all fermented liquors; and it is to this judicious management, and not to any medicine, either regularly preſcribed or empirically recommended, that he aſcribes his freedom from this hereditary malady. The powder which the late duke took himſelf, and of which he directed copies of the compoſition, and the manner of its preparation, to be given gratuitouſly to all who deſired it, is as follows:

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* "His Grace the Duke of Portland, who had, I believe, been perſonally an extreme ſufferer from the Gout, became acquainted with a medicine in Switzerland, for the cure of that inveterate diſorder; and after the moſt indubitable evidence of its intrinſic worth, purchaſed the receipt for the benefit of his country. This medicine, in a highly improved form, I beg leave to introduce to your notice; and hope, that the ſanction of the illuſtrious family by whom the receipt was firſt obtained, will ſecure an unbiaſſed attention to the neceſſary improvements now introduced into its compoſition." Mr. WHITEHEAD'S Hand-Bill, page 1.

" For the GOUT or RHEUMATISM.

" R. Ariſtolochia rotunda (or birthwort), gentian, root; Germander, ground pine, centaury, tops and leaves.

" Take of all theſe, well dried, powdered and ſifted as fine as you can, equal weight; mix them well together, and take one drachm of this mixed powder every morning faſting, in a cup of wine and water, broth, tea, or any other vehicle you like beſt; keep faſting an hour and half after it. Continue this for three months without interruption; then diminiſh the doſe to three-fourths of a drachm for three months longer; then to half a drachm for ſix months more, taking it regularly every morning if poſſible. After the firſt year, it will be ſufficient to take half a drachm every other day. As this medicine operates inſenſibly, it will perhaps take two years before you receive any great benefit, ſo you muſt not be diſcouraged, though you do not perceive at firſt any great amendment; it works ſlow, but ſure; it doth not confine the patient to any particular diet, ſo one lives ſoberly, and abſtains from thoſe meats and liquors that have always been accounted pernicious in the Gout, as Champaigne, drams, high ſauces, &c.

" N. B. In the Rheumatiſm that is only accidental, and not habitual, a few of the drachm doſes may do; but if habitual, or of long duration, then you muſt take it as for the Gout;—the remedy requires patience, as it operates but ſlow in both diſtempers."

The ingenious and learned Dr. JOHN CLEPHANE has given an excellent account of this very ancient preparation, in the firſt volume of the Medical Obſervations and Inquiries. It is mentioned, he obſerves, with very little variation from the above receipt, by Galen in the ſecond century; by Cælius Aurelianus, (from Soranus) who lived about the ſame time; by Actius and Alexander Trallianus in the fifth century; by Paulus Ægineta in the ſeventh century; by Myrepſus in the twelfth; by Franciſcus de Pedemontio, A. D. 1400; by the Prince of Mirandola, about 1480; by Tournefort in later times; and at a period ſtill later, it was tranſferred into the Paris Pharmacopœia, under the title of Pulvis Arthriticus Amarus.

This powder was given in the doſe of about a drachm, daily, for a year; as many of thoſe remedies called antidoti* were, and theſe directions are nearly copied in thoſe given for the uſe of the Portland powder, ſave that the latter is directed to be perſiſted in for a longer time.

But

* They were called from thence Annalia Medicamenta. Cæl. Aurel.

But though it cannot be denied that the ancient writers recommended, in ſome caſes, theſe bitter preparations as remedies for the Gout, yet they adviſed them with conſiderable reſerve, and an apprehenſion of their danger.

Soranus,* who adviſed them, cautions againſt their being long continued; as, he ſays, they brought on ſome perſons acute complaints; on others, apoplexy; on others, pleuriſy and peripneumony; and in ſome caſes, difficulty of breathing, or dyſpnœa.

All of the writers on the ſubject, caution againſt the indiſcriminate uſe of it in all caſes and habits, as they aſſure us that they are extremely hurtful in hot and bilious habits, and proper only in cold phlegmatic conſtitutions. They alſo judged them to be very dangerous in caſes of long ſtanding, and adviſe no trial of them to be made where the complaint has exiſted *five*, or at moſt, *seven* years.

Such is the abſtract of the accounts given of this remedy by the writers of antiquity. Let us now turn to the modern accounts, and particularly to that of the celebrated Dr. Cullen, who is vouched as evidence of the fact by Mr. Whitehead; wherein it will appear, with what impropriety, and under what miſrepreſentation, this admirable phyſician has been introduced as encouraging a practice he always reprobated in his converſation, as I can teſtify, and in his writings, which are open to the peruſal of every one.

" In every inſtance," ſays Dr. Cullen, in his †Practice of Phyſic, " which I have known of its exhibition for the length of time preſcribed, the perſons who had taken it were, indeed, afterwards free from any inflammatory affection of the joints; but they were afterwards affected with many ſymptoms of the atonic Gout, and *all*, ſoon after finiſhing their courſe of the medicine, have been attacked with apoplexy, aſthma, or dropſy, which proved fatal."

In a later publication of the ſame eminent writer, he obſerves, that " the effects of this powder in modern times, have been very much on the ſame footing with the ancient. It is poſſible, ſays he, that ſeveral perſons may have taken the Portland powder, and other bitters, with ſeeming great advantage; but I have not had opportunity to know the ſequel of the whole of ſuch perſons lives, ſo as to ſay poſitively how far, in any caſe, the cure continued ſteady for a life of ſome years after, or what accidents happened to their health.

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* Cælii. Aurel. L. v. c. 2.

† § DLVII.

" But I have had occaſion to know, or to be exactly informed, of the ſate of nine or ten perſons who had taken this medicine for the time preſcribed, which is two years. Theſe perſons had been liable for ſome years before to have a fit of regular or very painful inflammatory gout, once at leaſt, and frequently twice in the courſe of a year; but after they had taken the medicine for ſome time, they were quite free from any fit of inflammatory gout, and particularly when they had completed the courſe preſcribed, had never a regular fit, or any inflammation of the extremities, for the reſt of their life.

" In no inſtance however that I have known, was the health of theſe perſons tolerably entire. Soon after finiſhing the courſe of their medicine, they became valetudinary in different ſhapes, and particularly were much afflicted with dyſpeptic and what are called nervous complaints, with lowneſs of ſpirits. *In every one of them*, before a year had paſſed after finiſhing the courſe of the powders, ſome hydropic ſymptoms appeared, which gradually increaſing in the form of an aſcites or hydrothorax, eſpecially the latter, joined with anaſarca, in leſs than two or at moſt three years proved fatal.

" Theſe accidents happening to perſons of ſome rank, became very generally known in this country, and has prevented all ſuch experiments ſince." Such are the words of Dr. Cullen; and the reader will, I am certain, join with me in cenſuring the diſingenuous perverſion of them in the printed paper alluded to *. Had the whole of the paſſages I have cited been inſerted into Mr. Whitehead's recommendation of the remedy, who could have imagined Dr. Cullen could be introduced as bearing teſtimony in favour of its uſe? But the real opinion of Dr. Cullen is ſuppreſſed, and only ſo much of the effects of the powder is inſerted on his authority, as may ſerve the purpoſe of perſuading thoſe who have not had an opportunity of knowing his real ſentiments. In juſtice to him, and to mankind, I now lay them before the public, and I am confident the candid and benevolent part of the world will think me fully juſtified in publiſhing this caution in the uſe of a remedy of this character. But its ill effects were not known to our own countrymen only; Werlhoff, a German practitioner of eminence, and firſt phyſician to his late Majeſty for the Electorate of Hanover, agrees in condemning theſe bitter remedies

* " This celebrated remedy, ſince its introduction into England, is acknowledged by the moſt eminent of the faculty to be capable of removing the paroxyſms of the gout; and we may freely conclude the teſtimony of the celebrated Dr. Cullen, of Edinburgh, undeniable evidence of the fact."
Mr. WHITEHEAD's Advertiſement, or Hand-bill, Page 1.

remedies for the gout. After saying that the return of the painful paroxysms is thereby prevented, he adds, "that by the excessive use of these bitter remedies, he has known the digestive power of the stomach to be so weakened, as to produce a loss of appetite, and proper concoction of the food, which has accelerated the death, instead of restoring the health of those who had used them, who thus paid the severe penalty attendant on the trial of these unlucky and mischievous remedies."*

Murray, the Gottingen professor, gives in his Apparatus Medicamentum, a similar account; and adds, "that the powder produced in many instances, apoplexy, palsy, and acute disorders, together with difficulty of breathing, a dry cough, and tubercles of the lungs, which proved suddenly mortal.†

The reputation of this medicine having declined before I had any opportunity of observing its effects at the time of taking, and its mischievous consequences having prevented its having many living vouchers of its success, I cannot say any thing of it from my own experience. I remember, indeed, one person far advanced in years, who was I believe a Proctor in the Ecclesiastical Court at York, who was pointed out to me as a remarkable instance of one who had survived the effects of this remedy. He appeared in good health, and had not I believe experienced any ill effects from the powder. But this is, as far as my information goes, a solitary instance, and no more to be depended on as an encouragement to the trial of the remedy than an extraordinary case of excess in spirituous liquors, which still did not appear to abridge life, or injure health, would be to encourage the indulging in that odious and poisonous beverage.

Bath, Feb. 12, 1801. WILLIAM FALCONER.

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* Sed ex nimio horum amaricantium usu, fermentum stomachi adeo debilitatum esse memini, ut nonnuli appetitum amiserint, cibos non concoxerint, mortem hinc potius, quam sanitatem accelerarint; malique ex infausti remedii fœvas dederint pœnas. WERLHOFF, Caut. Medicæ, Page 346.

† Ex pulvere arthritico multi apoplexiam, paralysin, vel morbos acutos, senes præcipue, contraxerunt. Et in homine quodam, arthritis quidem inde sedata, sed respiratio difficilis, tussis sicca, morsque subitanea successit, tuberculis pulmonum post mortem conspicuis.

MURRAY, Vol. I. Page 355.

To

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IF the following obſervations reſpecting Yeaſt, merit a place in your valuable Journal, you will much oblige me by inſerting them next month.

Uxbridge,
20th March, 1801.

I am, &c.

A. EDLIN.

When profeſſional men come forward in a candid manner to announce to the world the reſult of ſuch new remedies as they have employed, either from their own ſuggeſtion or the recommendation of others, it is rather unfair to criticiſe their opinions and condemn their practice, without deliberate reflection, or even without a trial; inſtead of attempting by experiment and enquiry, to appreciate the merit of ſuch diſcovery.

The very act of holding up new remedies to the ſhafts of ridicule, may deter timid practitioners from adopting them; hence the ſpirit of enquiry is ſtifled, and the cauſe of truth extinguiſhed. In this point of view I am led to conſider a controverſy that has taken place between Mr. Groſe and Mr. Cuſtance, reſpecting the uſe of yeaſt in typhus fever.

If Mr. Cuſtance, inſtead of treating the practice as empirical, and dilating upon it with levity, had examined the ſubject with ſerioufneſs and deliberation; if he had taken the trouble to inveſtigate the nature and properties of yeaſt, and conſidered the effects of its conſtituent principles in the cure of fever, the judicious part of the profeſſion would then have received his obſervations with candour; and although they might have diſſented from his opinion, would have reſpected his motives. But when a medicine is unjuſtly condemned, without the leaſt reſpect to practice, and in open violation of all ſound reaſoning, it behoves every one who has the good of his profeſſion at heart, to ſtep forward, and prevent, if poſſible, ſuch pernicious doctrines from being implicitly believed.

I, in common with many other gentlemen, have tried and experienced the beneficial effects of yeaſt in typhus fever, and I truſt many more will try alſo. I reported in a little pamphlet on malignant fever (which Mr. Groſe has done me the honour to recommend), a few caſes where I had found it particularly ſerviceable, and ſince that time have had frequent occaſion to try it in ſimilar complaints, and have uniformly ſeen it do good. I will not go ſo far as to aſſert, that yeaſt will effect a cure alone; yet, notwithſtanding, it may be conſidered as a moſt powerful

powerful auxiliary; and often when the ſtomach is ſo irritable that bark will be inſtantly rejected, a cautious exhibition of yeaſt will quiet that irritation, and keep alive the vital ſpark, till more powerful means can be had recourſe to.

It is in this way I am perſuaded, that Mr. Groſe has exhibited yeaſt, adapting that and other remedies to the exigencies of the moment, varying his plan according to the ſymptoms, and thus ſhewing himſelf a ſkilful phyſician in oppoſition to the empiric, who boaſts of his noſtrum to cure every diſeaſe.

In order to induce your readers to try ſo promiſing a remedy, I beg leave to detail the following experiment, and from the concluſions that naturally ariſe, I truſt a ſatisfactory explanation will be given, why yeaſt is ſerviceable in typhus fever.

I took a portion of yeaſt freſh from the brewhouſe, and put it into a glaſs retort; this was placed over the pneumato-chemical apparatus, and by means of a lamp received over ſeveral vials of a gas which were ſubjected to teſts that clearly proved it to be carbonic acid gas, as expected.

This ſubject naturally brings to our recollection the experiments of Dr. Macbride, who was not only enabled to preſerve meat from putrefaction, by incloſing it in veſſels of fixed air, but alſo to reſtore ſuch as was bordering upon putrefaction to its original purity again; and he was of opinion that this gas united with the putrid ſubſtance, and reſtored the acid it had loſt during the time of putrefaction.

It may be argued, that a complete putrefaction is not a complaint of the human machine that can be an object of practice, becauſe it cannot take place in any important part of the body without extinguiſhing life; but there is a tendency to it in a conſiderable degree in various morbid diſorders, which yeaſt is very likely to correct or reſiſt; hence it is evident, that ſuch articles of Materia Medica as contain a large portion of fixed air, in a ſtate to be gradually evolved in the ſtomach, are of great uſe in fevers of a putrid tendency; and this accounts for the good effects of cyder, bottled porter, and yeaſt; and whatever may be its mode of action, the fact is indiſputable, that fixed air takes off that extreme debility of the ſtomach ſo conſpicuouſly marked in theſe diſorders; and in proportion as that ſubſides the pulſe riſes, becomes ſlower and fuller, the cauſtic heat on the ſkin diſappears, and a truce is gained for the reception of more nouriſhing ſupplies.

Such is my opinion concerning yeaſt as an antiſeptic, and I truſt that Mr. Cuſtance's liberality will excuſe the freedom of theſe remarks, and flatter myſelf, that at ſome future period he will alſo come forward with his teſtimony in ſupport of its credit in typhus fever.

T.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

THE Angina Maligna being a diſeaſe which has made its appearance in this kingdom, with more or leſs ſeverity for ſeveral years; and it being probable it may continue to viſit us, I beg leave to recommend a plan for preventing the ſpreading of the contagious effluvia; a plan which I adopted in the year 1791, and have ſince witneſſed its ſucceſs in ſome hundreds of caſes.

It would be ſuperfluous in me to give a full hiſtory of this diſeaſe, as we have it from a more able man, Dr. Fothergill, who wrote in the year 1748. This author, after noticing the opinions and practice of the Spaniſh and Italian writers on the ſubject, gives a very faithful and perfect detail of its firſt appearance in this country; alſo its progreſs, with the mode of cure. He concludes his treatiſe, by obſerving,

1ſt. That the ſore throat, attended with ulcers, ſeems to be accompanied with a ſtrong diſpoſition to putrefaction, which affects the habit in general; but the fauces, and the parts contiguous, in particular; and it ſeems not unreaſonable to ſuppoſe,

2dly. That the cauſe of this tendency is a putrid virus, or miaſma ſui generis, introduced into the habit by contagion, principally by means of the breath of the perſon affected.

3dly. That this virus, or contagious matter, produces effects more or leſs pernicious, according to the quantity and nature of the infection, and as the ſubject is diſpoſed to receive or ſuffer by it.

4thly. That putrefactive and malignant diſeaſes, in common, admit of the moſt ſenſible and ſecure relief from diſcharges of the peccant matter, either upon the ſkin in general, or on particular parts of the body.

5thly. That the redneſs and cutaneous efflorescence in the preſent caſe, may be conſidered as an eruption of the like nature, and therefore to be promoted by ſuch methods as have proved ſucceſsful in ſimilar caſes.

As my paper offers only a recommendatory plan of prevention, it may ſeem a digreſſion in my noticing a curative caution, as to the mode of treating the ulcers; but this I am prompted to, from obſerving the attention (recommended by Spaniſh authors, as well as by gentlemen in the iſland of St. Vincent and Grenada), to the uſe of local applications to the throat. In two letters from John Collins, Eſq. of the Iſland of St. Vincent,

cent, addreſſed to Benjamin Vaughan, Eſq. of London, in the year 1790, is deſcribed a diſeaſe not confining itſelf to the above iſlands, but a diſeaſe that extended through the whole range of iſlands in that quarter; its attacks were followed with fatality in a great many caſes. Bark and tonic medicines were given with little or no effect; and the gangrenous diſpoſition of the throat was only checked by capſicum; a remedy which at once gives us not only the evident ſenſe of its activity, but the ample proof of its innocence, when taken in a large quantity; a remedy which is uſed in intermittent fevers, and for the ſuppreſſion of vomitings, in the putrid fevers of warm countries, with ſucceſs.

But to the point. My own obſervations lead me to obſerve, that the diſeaſe in queſtion generally makes its firſt attack on weakly children; that its conſequences depend upon ſeaſons, ſituations, conſtitution, and method of treatment; that in one or two caſes, at firſt, it may prove of a benign and doubtful nature; but that the efflorescence on the ſkin will expoſe to us the inſidious enemy; that it is communicated by the contagious effluvia from an ulcerated throat lodging on the tonſils of other perſons; that death to a certain extent is produced in the part; that no inconvenience is at firſt felt, more than an aching, a ſtiffneſs, and an inability to move the neck; that in a day or two the ſlough is removed by ulcerative inflammation; that vomiting, chillineſs, and fever, with head-ach, now come on, accompanied by heart-burn and diarrhœa; that theſe ſymptoms are ſucceeded by an efflorescence on the ſkin, and by perſpiration, which generally prove ſalutary, and lead to a cure. Having related what has appeared to me the uſual courſe of the diſeaſe, I will briefly mention my method of prevention. It conſiſts, in ordering to all the attendants of the ſick, a tea ſpoonful or two of the under written gargle to be uſed, and ſwallowed every two hours. It is meant to produce and keep up a regular excitement on the tonſils, uvula, and fauces; and by that means enable them to reſiſt the ſedative effects of the human poiſon. I will repeat what I before mentioned, that where the gargle is ſufficiently pungent, and often enough uſed, I have never ſeen it fail.

℞. Pip. Cayenn. coch. j. magn. Sal. comm. coch. j. min. aq. bull. ℥iij. acet. diſtill. ℥iij. f. garg.

I am, &c.

Calne, Wilts, March 16, 1801. HENRY HEADLY.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IN the laſt Number of your valuable Journal, I ſee Mr. Sheldrake has again reſumed the diſpute, with regard to diſtorted limbs; and it is ſingular enough, that he ſhould now aſſign the *ſame* reaſon for doing this, that he did on a former occaſion for leaving it off*. In his laſt communication, however, he appears to have deſerted in a great meaſure the original diſpute, and to have ſubſtituted another in its place, from which he, no doubt, expects to acquire greater honour, or at any rate, to derive leſs diſgrace.

His original anſwer to my communication conſiſted of *three grand charges*, and a few common-place obſervations.—The firſt charge was, "That my invention was not original." In proof of this, three *reaſons* were adduced, all of which I have elſewhere refuted ſo fully, that Mr. S. has not ventured to ſay a *ſingle word in reply*. The ſecond charge was, "That the invention was uſeleſs." In proof of this, a number of *aſſertions* were adduced, all of which I have refuted fully by the beſt of all arguments, the teſt of experiment. And every day I ſee new proofs added to thoſe I have already brought forward. This part of the anſwer Mr. S. has alſo relinquiſhed as *indefenſible*; not a *ſingle word* is ſaid of it in his *laſt* communication. The third charge was, "That the hint thrown out in the end of my communication, with regard to the application of *a ſpring* to curvature in the bones of the leg, was *borrowed*, *copied*, or *purloined* from a work of *his*." This I alſo refuted as fully as I thought the importance of the ſubject required, or any reaſonable man could aſk; but as Mr. S. *ſeems ſtill unconvinced*, I beg leave to ſay a few words more on this ſubject.

I threw it out merely as a hint, which might be improved by others without ever having tried it myſelf; and in doing this I was not conſcious of doing injury or giving offence to any man;

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* The reaſon Mr. S. aſſigned on a former occaſion for leaving off the diſpute, was my having uſed *perſonal abuſe*. Now, "It is to repel *ſuch reflections* ONLY that he has written this; and truſts that *you* (the Editors) will ſee the propriety of putting an end to *ſuch* diſputes, *which*, by the *conduct* of my *opponent*, have degenerated into *perſonal abuſe!*" When Mr. S. made this peroration, he ſeems to have foreſeen clearly, and dreaded the conſequences of his laſt communication!" He therefore, in order to get off with the victory, makes this ſingular requeſt to the Editors, that they publiſh *nothing more from his opponent!*

man; for I may ſay, and I can ſay it with truth, that I had never *ſeen* nor *heard of* Mr. Sheldrake's *ſpecification*, nor his *Practical Eſſay*; nor did I know that ſuch a man was *in exiſtence* till I ſaw his anſwer to my communication. But as this *truth* can only be ſubſtantiated by *my aſſertion*, and as Mr. S. will probably require ſtronger evidence, I may obſerve that all the reſemblance between the two contrivances is ſimply this, *both uſe a ſpring*. But of the particular method of uſing it, Mr. S. gives no account; he ſays, it may be applied "by bandage or otherwiſe." In my communication, however, I give a *particular* account how it is fixed to the machine, how it is applied to the leg, and how it is to operate.

It is certainly a very *ſlender* proof of plagiariſm to ſay that becauſe I uſe a *ſpring*, and you uſe a *ſpring*, therefore *you* muſt have "borrowed, copied, or purloined" your idea from *me*. He might as well ſay that becauſe a *watch* is put in motion by the action of a *ſpring*, a *fire-lock* is the *ſame*; therefore the man who invented the one muſt have borrowed his ideas from the other; or as Mr. S. would elegantly expreſs it, "That he is a *mean* plagiary who *meanly* extracts from the works of others; thus meanly ſeeking to deprive them of what reputation may attach itſelf to their diſcovery, and hoping to *purloin* that reputation to which *his conſcience tells him he has no right!*" This is directly aſſerting that it is impoſſible for two men to think in the ſame way, without the one having borrowed his ideas from the other. This is contrary to Mr. S's *own* opinion; for he ſays, that "the exiſtence of ſimilar paſſages in different authors does not *neceſſarily* imply plagiariſm in either."

If a bone, or other flexible body, be bent to the one ſide more than is proper, would it not be very natural for a man to think or ſay, that if preſſure was made on the convex ſide, and reſiſtance at the two ends, that the curve of courſe would be diminiſhed. This is a principle known to every *mechanic*, and to every man who exerciſes his reaſon, and this is all Mr. S. claims as *his invention!* He ſays this operation may be done by a ſpring and bandage, or *otherwiſe*." In my communication, however, I ventured a little farther, and gave a drawing and deſcription, not only of the machine and ſpring by themſelves, but alſo of the manner in which they were to be applied to the leg.

But if Mr. S. ſhould ſtill doubt that I have borrowed my ideas from him, nothing certainly can be more convincing than his own words. "In the mean time," ſays he, "I beg leave to obſerve, that if a congreſs was aſſembled of all the *patients* who have been under my care, with their *friends*, and the *medical men* who have attended them, they would unanimouſly de-

termine that Mr. W. has not *at preſent the moſt diſtant comprehenſion of my plan.*" And again, "Whoever will try (ſpeaking prophetically) that particular modification of a ſpring which *he* recommends, will find *that it cannot anſwer the purpoſe he recommends it for.* I would aſk Mr. S. how is it poſſible that I could have *borrowed*, *copied*, *purloined*, or by whatever term plagiariſm may be deſigned," his ideas without having "the moſt *diſtant comprehenſion* of his plan?" Or how my plan, which he declared on a former occaſion was the ſame as his, ſhould be ſo *ineffectual*, while his is *efficacious?* Theſe involve Mr. S. in a contradiction from which it will coſt him *ſome trouble* to extricate himſelf.

Mr. Sheldrake ſurely does not claim the merit of having firſt invented a *ſpring*. No,—ſprings were known long before his day. It is only a *particular manner* of applying it to a *particular purpoſe*, that he claims as *his invention*; and of this *particular manner* he declares that I have not *at preſent the moſt diſtant comprehension*; therefore it was *impoſſible* I could *borrow*, *copy*, or *purloin* it from him. I may obſerve too, on the other ground *he* has laid down, that *my* invention cannot poſſibly be the ſame as *his*, or borrowed from *him*, ſince "it cannot anſwer the purpoſe it is recommended for," or as he elſewhere expreſſes it, "if any perſon will try the inſtrument deſcribed by Mr. Watt, he will find it *perfectly uſeleſs!*" If two inſtruments are the ſame, the effects they produce muſt alſo be the ſame. But if the effects are as *widely* different as Mr. S. has ſtated, it is ſurely no ſtrained concluſion to infer *that the inſtruments are as widely different as the effects they produce*; and therefore the man who ſuggeſts the one can have no claim on the man who ſuggeſts the other. Theſe are concluſions fairly drawn from Mr. S's *own premiſes*, and to which *he cannot poſſibly object.*

It would certainly be neceſſary when Mr. S. reſumes the diſpute, that he ſhould make public through the medium of your Journal, *or otherwiſe*, a deſcription and drawing of his plan, for it is evident he has not yet promulgated any thing on that head, or what he has promulgated is ſo obſcure as not to be underſtood. For he declares I have not, "at preſent, the moſt diſtant comprehenſion of his plan." This, however, he may ſay is owing to the obtuſeneſs of my intellect, by which I am not able to comprehend him; but he has ſaid elſewhere,* "that it

* In a converſation that paſſed between Mr. S. and Mr. Pugh, concerning the cure of a diſtorted limb, Mr. S. ſays, that "Mr. P. was delighted to hear

it must be by means ONLY KNOWN TO MYSELF, and by my *own* application." This puts it beyond all doubt, and shows the necessity of Mr. Sheldrake's bringing forward his invention; for how can a man dispute on a subject of which he has not the most distant comprehension? Or how can Mr. S. blame others for purloining from him that which is known ONLY to himself. It must therefore depend entirely upon the *dictum* of Mr. S. whether my invention is the same as his or not, since HE *only knows what his invention is.*

Having discussed what belongs to the original dispute concerning distorted limbs, I come now to consider the charge of *personal abuse*;† and as Mr. S. has complained so much of this particular, I shall trouble you with a few passages extracted from his last, which if they answer no better purpose, they will *at least* convince your readers, and Mr. S. among the rest, that no inconsiderable proportion of his communications is made up of *such materials.* Among many other *epithets* and *insinuations*, which it would be endless to enumerate, I am denominated by Mr. Sheldrake:

"*A Plagiary, a Purloiner, a Liar, a Coward, a Slanderer, a Dogmatist, an Impostor, a professed Controvertialist, a Reproacher, a whimsical Person, and a Freebooter.*" ‡

When Mr. S. was writing an essay for the *express purpose* of repelling such *slanderous personal abuse*, he ought to have couched it in language that was *at least decent*, and not have proceeded to pluck the *mote* out of his neighbour's eye till he had first taken the BEAM out of his own. I cannot however help admiring

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hear that I thought a cure was not impracticable, and laboured ARDENTLY to persuade *me* to inform *him* of the method I should use, and put *him* in possession of my instruments; but finding ME INFLEXIBLE, he, with *the affectation of much liberality, declared* he only sought for the benefit of the patient, and therefore consented that I should proceed in my *own way*. Medical and Physical Journal, Vol. iv. p. 494. This proves in a very satisfactory manner that Mr. S. has not as yet made his plan public, nor, on account of his *inflexibility*, does he appear willing to do so.

† For the personal abuse used against Mr. Sheldrake, see Medical and Physical Journal, Vol. v. p. 266, or rather Vol. iv. p. 498 to 503

‡ Mr. S. says his patent extends only to England and Wales, and not to North Britain. This however is his own fault; for had his invention been of so much importance as he pretends, he could easily have extended it to Scotland also, and not have deprived any part of his country of so *invaluable a blessing!* But I may observe, that the *celebrity* of many inventions depends more on the *secrecy* with which they are preserved from the *eye of the public* than on any *intrinsic value* in themselves. Whether Mr. S's is of this description or not, *no man* can say, since his invention is known *only to himself.*

admiring his ingenuity in being able to introduce ſo many of theſe *elegant figures of ſpeech* within ſuch narrow limits! In this particular he has certainly equalled, if not excelled, moſt authors who have written on the ſubject. I am, &c.

Paiſley, March 25, 1801. R. WATT.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IF you think the following caſes deſerve a place in your very uſeful Publication, you are at liberty to inſert them. The firſt proves that the Small-pox do not prevent the Vaccine Contagion from taking its uſual effect, if properly applied to the body. The ſecond proves that the two diſeaſes may exiſt at the ſame time in the ſame perſon, and yet continue perfectly diſtinct.

CASE FIRST.—In the beginning of February laſt, I inoculated M. W. a girl about five years of age, with Vaccine Matter on both arms. After ſhe had gone through the uſual ſtages of the diſeaſe, about the eleventh or twelfth day I opened the puſtules, and was extracting matter from them for the purpoſe of inoculating others. Her uncle, Mr. W. a man about twenty-ſix years of age, was looking on, and appeared to be very much taken up in examining the appearance and conſiſtence of the matter; and I obſerved him frequently touching it with his finger.

On the ſeventh day after this, I was called to examine his noſtrils, which appeared very much excoriated and inflamed, in conſequence of a ſevere cold he had received a few weeks before: The ſalivary glands too, on both ſides, had begun to ſwell, and were become exceedingly painful. He attributed this to a freſh cold he had received a few days ago, and which appeared to me extremely probable. I ordered leeches to be applied to the inflamed glands, and directed him not to expoſe himſelf again to the cold till he had fairly recovered.

On the eighth day the ſwelling in the glands continued, but the pain was conſiderably relieved ſince the bleeding. The noſtrils were more inflamed, and the noſe itſelf was ſwelled to a very great ſize, and extremely painful: I ordered leeches to be applied to it, which gave him conſiderable relief.

On the ninth day the pain in the noſe had returned, and the ſwelling continued to increaſe. The patient was exceedingly alarmed

alarmed, and inſiſted to know what I thought was the matter with his noſe: He ſaid he believed it was a cancer, for the noſe was often ſubject to that diſeaſe; I aſſured him, from its appearance, and the rapid progreſs it had made, that I was convinced that it was not a cancer. On examining carefully his noſtrils, I could perceive ſomething in each of them that very nearly reſembled a Vaccine puſtule: The nearer I examined it I found the reſemblance ſtill more complete. I aſked him whether or not he thought any of the Cow-pox matter could poſſibly have got into his noſtrils, as I recollected his handling ſome of it when I took it from his niece's arms. He ſaid it was very poſſible, for at that time he carried a ſmall box of ointment in his pocket, with which he uſed frequently to anoint his noſtrils; and that he might probably have done this with the ſame finger with which he had touched the Vaccine Matter.

This account confirmed my ſuſpicions, and removed my fears; for I muſt confeſs I was conſiderably alarmed at ſuch a ſingular phenomenon, ſo widely different from any thing I had ever ſeen. I told him not to be afraid, he had only inoculated himſelf with the Cow-pox, and would ſoon be better. In three or four days more the puſtules were completely formed, and the diſeaſe at laſt terminated in the uſual way. In two weeks after the noſtrils were completely whole; and what is ſingular, for ſeveral years paſt, Mr. W. in the ſpring ſeaſon was much afflicted with ſore noſtrils; and this year, prior to the inoculation, they appeared to be worſe than ever; but ſince that time they have been perfectly ſound, and the ſkin ſtronger than it has been for ſeveral years paſt. May not the inſertion of Vaccine Matter into ſome inveterate ulcers produce permanent cure?

Mr. W. had the Small-pox, without inoculation, about twenty years ago, of which ſome ſlight veſtiges ſtill remain.

Case Second.—On the 4th of February laſt, Mrs. B. applied to me to inoculate her child, who was then about five months old. She ſaid ſhe was very much alarmed, for the Small-pox a few days ago had appeared in the neighbourhood where ſhe lived, and two children had died of them. At this time I happened to be out of matter, and could not procure any for three days. On the 7th of February the child was inoculated in both arms, with freſh matter taken immediately from the arm of another child and applied to her.

I ſaw her again on the fourth day after the inoculation, when ſhe appeared to be in a very high fever, and had continued ſo for two days. I ſuſpected, as ſhe was near to patients who had the

the Small-pox, that ſhe might probably have caught the infection, prior to the inoculation with the Cow-pox. I examined her body carefully, but could perceive no eruptions that could confirm my ſuſpicions.

On the fifth day, however, the fever had begun to abate, and the eruption appeared: She had about a hundred diſtinct puſtules on her whole body; theſe continued for about ſeven or eight days, and then dryed and ſcaled off; during which time ſhe was in good health: the Vaccine Inoculation had alſo taken effect, and both arms inflamed, and went through the ſame ſtages as if no other diſeaſe had exiſted. On the eleventh day after the inoculation, I opened the puſtules, and extracted a quantity of matter from them, with which I inoculated ſeveral others, who all took the Cow-pox in the uſual way, without any other eruption whatever.

I made enquiry in the neighbourhood of the place where Mrs. B. lived, concerning the patients from whom her child had caught the infection, and I found that all of them had been extremely ill. That out of eleven, five had died, and the other ſix had eſcaped very narrowly. It was Mrs. B's fourth child; her two firſt had died of the Small-pox; they were a year old: the third is living, but very much marked by them.

May not the inoculating with Vaccine Matter in caſes where we ſuſpect that the patients are infected with the Small-pox, render that diſeaſe more mild than it would otherwiſe be?

I am, &c.

Paiſley, March 27, 1801. R. WATT.

The following Address, with the GOLD MEDAL, *voted by the Naval Medical Officers, has been presented to Dr. Jenner. Subjoined is a Liſt of these Gentlemen in Support of the New Inoculation.*

To Dr. JENNER.

SIR,

YOU are, perhaps, no ſtranger to the information of the new Inoculation being directed throughout the Navy by Admiralty authority. The inquiries which had been inſtituted in the Channel for the laſt ſeven years, had called the attention of the ſurgeons to guard againſt the introduction of the Small-Pox

Pox among ſeamen; which in more than a hundred inſtances during that time, had been imported by ſhips; twenty of theſe have occurred within the laſt ſix months in this fleet only. Amidſt ſubjects ſo ill prepared for its reception, more than the common proportion of deaths has been the conſequence.—Such was the tenor of our reſearches, when Dr. Jenner announced to the world the Vaccine Inoculation as a *preſervative* againſt variolous infection: *Tandem venias augur Apollo.*

As far as the new practice has extended among us, it has been followed with the uſual ſucceſs, and ſo mild, that the ſubjects of it have not been conſidered in the number of ſick on the liſt. But the value of conducting the Vaccine Inoculation with ſpirit and perſeverance throughout the navy, may be beſt eſtimated by calculating the ſeamen at 10,000, who are unconſcious of having had the Small Pox; in this proportion I am juſtified by the experience of muſters in infected ſhips. How dignified the councils of any nation, that by timely precaution ſhall ward off ſo much probable human miſery!

The medical officers have not been paſſive ſpectators of an event ſo ſingular in the hiſtory of animated nature; an event which the Philoſopher will contemplate with wonder, and the friend of his ſpecies view with exultation. Although ſecluded by their office from the earlieſt communication with the progreſs of medical ſcience, what relates to the Vaccine Diſeaſe has been earneſtly ſought after; and the whole of your opinions and practice have excited uncommon attention amongſt us. I am therefore requeſted to preſent you, in the name of theſe gentlemen, with a GOLD MEDAL, and ſuitable devices; at once expreſſive *of their ſentiments in favour of the New Inoculation, and to commemorate its introduction into this department of public ſervice.** With the more pleaſure I comply with the wiſhes of my worthy aſſociates, as I am confident that no token of reſpect beſtowed on a benefactor of the human race, was ever conferred from more honourable or diſintereſted motives. It will not be the leſs acceptable to Dr. Jenner, that it comes from a body of officers connected by the exerciſe of their profeſſion with the moſt brilliant period of our naval annals. As far as their authority has influence, they thus offer their warmeſt ſup-

* The medal repreſents Apollo as the God of Phyſic, introducing a young ſeaman recovered from the *Vaccine Inoculation* to Britannia, who, in return, extends a civic crown, on which is written, "JENNER." Above, "ALBA NAUTIS STELLA REFULSIT." Below, "1801."

On the reverſe, an anchor; over it, "GEORGIO TERTIO REGE;" and under it, "SPENCER DUCE;" expreſſing the royal navy in the reign of George the Third, and naval adminiſtration of Earl Spencer.

port to the cauſe. The progreſs of truth is ſometimes ſlow, but always certain. It is not in the nature of medical inveſtigation long to reſiſt the evidence of facts; and it is far leſs the province of medicine to check the current of charitable feelings, or to circumſcribe the duties of benevolence. We muſt therefore hope, that while the liberal diſcuſſion it has undergone ſhall ſecure the ſuffrages of the enlightened mind, the love of offſpring will confirm its favourable reception throughout domeſtic life.

Accept, Sir, in the name of my naval friends, my hearty congratulations on the honours that await your profeſſional exertions. May the preſent age have the juſtice and public ſpirit to remunerate what poſterity will be glad to appreciate; may the Medical Faculty have virtue and candour ſufficient to acknowledge the value of your labours; may your example be a model to the riſing members of that profeſſion which you adorn; and may you be bleſſed with length of days to ſee your diſcoveries the means of abridging and preventing diſeaſe, pain, and deformity throughout the habitable globe.

Incloſed, I have the honour to tranſmit a liſt of the medical gentlemen, and their ſtations in his Majeſty's naval ſervice. I beg, with all perſonal eſteem and regard, to ſubſcribe myſelf,

SIR, Your, &c.

T. TROTTER.

Plymouth Dock, Feb. 20, 1801.

NAVAL SUBSCRIBERS to the JENNERIAN MEDAL, 1801.

Dr. THOMAS TROTTER, Phyſician of the Fleet.

Names.	*Ships, &c.*
Wm. Hill, Surg.	Edgar
James Veitch	Doris
F. M. Chevers	Robuſt
W. Robertſon	Garland
W. Hamilton	Clyde
J. M'Intoſh	Galatea
R. Allan	Oiſeau
A. Denmark	Viper
T Smith	Nimrod
J. Embling	Hoſp. Torbay
R. Hardwike	Magnificent
S. Hammick, jun.	Royal Hoſpital
R. Lloyd	Barfleur
An Admirer of Vaccinia	
T. Stewart	Pr. Frederick
Dr. T. Kein	Royal George
B. M'Keirman	Prince
B. M'Laughlan	Achille
H. Watſon	Cambridge
W. Muſgrave	Triton
J. Fraquhar	Captain
C. Cooke	Penguin
H. Hughes	Marlborough
T. Thong	Renard
R. Cuming	Leyden
Dr. E. Boys	Hoſp. Deale
W M'Curdy	Pr. George
D. M. Bell	Indefatigable
Dr. C. Cudlip	Mill Priſon
G. Bellamy	Spencer
J. Milligan	Malta

J. Bury

Names.	*Ships, &c.*
J. Bury	Unicorn
W. Gregory	Thames
J. Landleſs	Hydra
T. Quin	Loire
W. Gray	Nymphe
J. Morgan	Amelia
M. M'Cormick	Immortalite
W. M'Donald	Montague
Ral. Duke	Sprightly
Dr. J. Snipe	Hoſp. Yarm.
P. Cullen	Agamemnon
S. Allen	Albion
W. Oaſtler	Spitfire
S. Hammick, ſen.	Royal Hoſpital
G. M'Garth	Ruſſel
R. Burke	Acteon
W. Dingwall	Nemeſis
J. Leggat	Overyſſel
J. Scott	Audacious
A. Leſlie	Hazard
J. Boone	Solebay
D. Cowan	Eurydice
D. S. M'Carthy	Beaulieu
W. Nepecker	Juſte
J. Nutt	Cæſar
W. B. Smith	Pompee
R. Allen	Orion
A. L. Jack	Eſpeigle
J. Lind	Majeſtic
S. Fowell	Spider
W. M'Mullan	Canada
T. Toſh	Triumph
T. Wilſes	Centaur
J. Young	Lion
T. Simpſon	Fiſguard
W. Beatty	Alcmene
A. French	Scout
P. Blair	Mars
H. Perkin	Urania
B. F. Outram	Superb
T. Mant	Terrible
J. Smithers	Royal Sov.
J. Allen	Formidable
T. Watherſton	Temeraire
D. Fleming	Impeteux
R. Carruthers	Wareham
J. Home	Suffiſante
G. Turnbull	Venerable
R. Thompſon	Childers
Dr. M. Felix	Neptune
D. M'Arthur	Naiad
R. Palin	Sylph
M. Morgan	Mill Priſon.
F. Butt	Dragon
R. Fairfoul	Cleopatra
Dr. Douglas Whyte, Conſtantinople.	

On the reputed Anti-epileptic Power of Argentum Nitratum.

To the EDITORS of the MEDICAL and PHYSICAL JOURNAL.

Gentlemen,

IF you ſhould coincide with me in opinion, that medical ſcience is not leſs advantageouſly promoted by faithfully recording inſtances of unſucceſsful practice, than by anxiouſly detailing ſucceſsful caſes, you will, probably, deem the ſubſequent narrative of the inſufficiency of the nitrate of ſilver, (Argentum Nitratum) in the cure of Epilepſy, not unworthy of public notice.

The reputation which this chemical compound has acquired for its ſalutary influence in ſubduing this diſeaſe, reſts on the authority of conſiderable experience, and has been recently corroborated by communications in your Journal, from Drs. Cappe and Boſtock,* men whoſe acquaintance I highly value, and whoſe judgement and veracity claim my utmoſt deference. Warranted by ſuch credible evidence in its favour, I lately entered on its uſe in two caſes of epileptic affection, with more than my accuſtomed confidence in medicinal efficiency, even when oppoſed to leſs formidable difficulties.

The firſt caſe in which its employ came under my direction, was that of an elderly woman, of a weakly temperament, but not vitiated by any habitual diſorder, who had been afflicted with epileptic attacks at irregular intervals, during about eighteen months; they uſually recurred once a week, occaſionally oftener, and a reſpite of ten days had been very rarely experienced. Neither the violence nor duration of the paroxyſms offered any thing remarkable; nor were the ſubſequent inconveniences in any reſpect extraordinary.

This patient began with half a grain of the nitrate of ſilver, formed into a pill with crumb of bread, and was ordered to repeat it at equal diſtances, three times a day; each doſe during the firſt day, induced afflicting ſickneſs, without the alleviation of vomiting. Diſcouraged by this unexpected occurrence, the patient could only be perſuaded to proſecute the medicine, by being aſſured that it was accidental, and not due to its ordinary operation. Suſpecting that ſome inaccuracy had happened in diſpenſing the preſcription, enquiry was made, when it appeared, that in the abſence of the apothecary to whom it was ſent, a perſon not ſufficiently converſant with medicinal compoſition, had probably exceeded the quantity directed. The utmoſt exactneſs was then obſerved in preparing the pills, which were taken as before, but without any ſenſible effect: No variation was made in the doſe for three days; and no influence, during that time, was manifeſted by the medicine. It was then augmented to one grain three times a day; this was continued a week, in the courſe of which, a paroxyſm, as uſual, occurred, and no impreſſion was felt from the medicine. It was now increaſed to two grains at ſimilar intervals, and perſiſted in upwards of ten days; ſlight ſickneſs was occaſionally experienced, but no difference was induced either in the periods of recurrence, or the violence of the epileptic fits. The doſe was ultimately extended to three grains, at the diſtances before ſtated, and

* See Medical and Phyſical Journal, Vol. I. pages 184, 222.

and profecuted about three weeks, without any other proof of efficiency, than that of tranſient heat in the ſtomach, and ſlight nauſea ſoon after taking it.

It will appear from the preceding ſtatement, that the nitrate of ſilver was in this caſe freely exhibited, and its employ ſufficiently protracted for its full effect to have been produced; its complete failure, therefore, authoriſes the concluſion, that in this inſtance of epileptic affection it was wholly deſtitute of curative power.

The ſecond epileptic caſe in which the nitrate of ſilver was put to the teſt of experiment by my advice, was that of a young man, about thirty years of age, of a robuſt temperament, and free from any other habitual diſeaſe: The diſorder commenced in his infancy, and accompanied every ſtage of his growth to the ſtate of manhood, with but little variation either in the violence, frequency, or duration of the paroxyſms. It was conſidered as a rare occurrence for a week to elapſe without an attack; ſeveral uſually happened during that period. The diſeaſe ſeemed at length to have acquired an harmleſs familiarity with the general health, and the intervals of its recurrence were not ruffled by any ſenſible degree of morbid derangement.

As may be ſuppoſed in the courſe of ſo long a period as twenty-five years, every chance of relief was afforded, which either reflection or accident could deviſe or ſupply; no laſting benefit, however, had been obtained. Although the duration of the diſeaſe preſented every difficulty which an eſtabliſhed aſſociation of morbid movements could engender, the apparently unimpaired ſtate of the general health induced me to ſuppoſe that no irremediable organic læſion had been produced. Under this perſuaſion, without holding out the poſſibility of ſpeedy aid, or of even promiſing ultimate benefit, I judged it expedient to afford the patient a full chance of any advantage that might reſult from the ſucceſſive employ (if neceſſary) of various efficient medicines. Purſuant to this deſign, digitalis, opium, cuprum vitriolatum, zincum calcinatum, acidum ſulphuricum, argentum nitratum, hyoſcyamus niger, and cicuta, were ſeverally directed; the doſes, intervals of adminiſtration, length of continuance, and reſults of each of which, were as here ſpecified. Digitalis was taken from one grain to five, by ſlow augmentation three times a day, for ſix weeks, during which time occaſional giddineſs was experienced, but without nauſea, or diſcoverable retardation of pulſe; the intervals of the paroxyſms were lengthened to about ten days, and the attacks were leſs violent.

Opium was taken from one grain to three, by gradual increaſe

creaſe three times a day, during a fortnight, in which time but one ſlight fit recurred; but the pulſe was rendered unuſually full and ſlow, and an irreſiſtible propenſity to ſleep, with a threatening dilatation of the pupils enſued.

The digitalis and opium were now directed in conjunction, in doſes of two grains each, three times a day, and continued for two months, during which time two paroxyſms only returned; but this extraordinary ſuſpenſion ſeemed to have been purchaſed at the expence of an alarming degree of vertiginous affection.

The cuprum vitriolatum was taken from one grain to five, during three weeks, three times a day, with the effect of inducing occaſional nauſea, and an herpetic determination on the cuticular ſurface; but no perceptible variation in the epileptic paroxyſms.

The zincum calcinatum was taken from five to fifteen grains, three times a day, for three weeks, without any obſervable influence on the diſeaſe.

The acidum ſulphuricum was taken from thirty drops to two drachms, largely diluted with water, three times a day during one month, with the effect of ſhifting the period of recurrence a few days later than the previous time of acceſſion; but it may be remarked, that the patient, judging from his improved feelings of perſonal ſtrength and mental energy, expreſſed more confidence in the curative power of this medicine than in any thing which had been before adminiſtered.

The argentum nitratum was now taken, from half a grain to four grains three times a day for one month, without diſcovering the *ſmalleſt influence*, either in arreſting or modifying the epileptic paroxyſms, and with no other effect than that of inducing more or leſs durable ſenſation of burning heat in the ſtomach.

The hyoſcyamus niger was taken in ſubſtance from one grain to ten, three times a day during ſix weeks, in which time but two paroxyſms recurred, and theſe with diminiſhed violence and duration; but in the laſt week of its employ, a degree of vertiginous ſtupor ſupervened, which ſeemed to indicate that the progreſſive agency of this medicine was more likely to ſuperinduce a dangerous malady than radically to alter the unknown diſtempered conditions of vital motion, that form the proximate cauſe of epilepſy.

The cicuta was given in the form of inſpiſſated juice (ſuccus cicutæ ſpiſſatus), from five grains to fifteen, three times a day for one month; latterly it induced temporary giddineſs, but the paroxyſms returned with increaſed frequency and violence during its employ.

The

The purpoſe of entering into this detail of the various effects of the different ſubſtances employed, is to exhibit a comparative view of the inefficiency of the argentum nitratum. The cuprum vitriolatum, zincum calcinatum and cicuta were its congeners in inertneſs, or at leaſt complete inſufficiency for affecting any ſalutary change in the diſeaſe. It may be objected, that two caſes do not afford adequate experience for determining the powers of a medicinal agent; this muſt be admitted, but its force will be obviated by my offering them as a *contribution* only to the more extenſive evidence of ſimilar inefficacy adduced by the ingenious and accurate Dr. Magennis, in a late number of your Journal.* In that communication is recorded teſtimony on this ſubject, that demonſtrates a diligence of reſearch and tenaciouſneſs of truth but rarely combined, yet eſſentially requiſite to the practical inveſtigation of medicinal power.

In having my opinion biaſſed by actual obſervation, and the admiſſible authority cited againſt the reputed efficacy of argentum nitratum in the cure of epileptic affection, it is not my wiſh to deny it the poſſibility of proving remedial under certain conſtitutional circumſtances (not yet explained) favourable to its ſalutary operation; but this qualification diveſts it of all pretenſion to invariable effect, or to any influence that approaches to the character of ſpecific power, and reduces it to the ſtandard of all other efficient medicinal agents, that of occaſionally inducing changes in the morbid actions of animal life that lead to the regeneration of health.

It would be important to diſtinguiſh what temperamental, morbid, or accidental circumſtances are moſt conducive to the curative influence of argentum nitratum in this diſeaſe; until this information be furniſhed, the experience under this conſideration authoriſes the expectation, that the indiſcriminate employ of this agent in epilepſy will be more precarious in its effects, than may be preſumed from the uſe of ſeveral other medicinal ſubſtances of acknowledged power in certain diſeaſes, ſuch as the cinchona in intermittent fever, mercury in ſyphilis, opium in morbid exceſs of ſenſibility, digitalis in pulmonary conſumption, &c. Were, indeed, as much aſcertained of the moſt beneficially operative powers of argentum nitratum as of theſe enumerated, the reſpective incertitude of effect common to them all would yet attach to it, and render it at beſt a medicine of doubtful agency.

It will not be alleged, that uncertainty of operation is inapplicable to the moſt efficacious articles of the Materia Medica. It

* See the Medical and Phyſical Journal, No. XXI. page 417.

It will be recollected, that organic ſuſceptibility for medicinal impreſſions is, even *conſtitutionally*, widely various, and, *habitually*, infinitely different. On this diverſity, then, reſts the greater or leſs diſcordancy of influence from ſimilar agents.—The degrees of diſſimilarity in animal excitability, in different ſubjects, may range to the oppoſite extremes of being fatally and inertly impreſſed by the ſame ſubſtance; but the ſhades of reſemblance that remotely link, and progreſſively aſſimilate the likeneſs, afford a ſcale on which may preſent every intermediate variety. Hence, where moſt temperamental analogy ſubſiſts, will be moſt uniformity of medicinal operation from any particular agent. This reaſoning is not confined to different individuals, but applies with equal force to the ſame ſubject, to whom changes of ſuſceptibility are perpetually liable to occur, which might vary, or even contraſt, the effect of a former remedy.

What happens hourly muſt abound, and documents commenſurate with this vaſt ſource of accumulation croud in proof of the practical fact, *that no invariably curative or ſpecific power, as it has been termed, has ever exiſted; and in the nature of things, never can.*

The intereſts of humanity, as well as the juſt principles and dignity of medical ſcience, imperiouſly demand a decided diſtruſt in ſubſtances ſo often palmed on public attention for infallible remedies. The laws of animal life, however elementarily ſimilar, are ſo variouſly operative in diſſimilar conſtitutions and temperaments, as to render the deſideratum of uniform efficiency from an occaſionally beneficial medicine abſolutely unattainable; rational empiriciſm will, therefore, be guarded in predicting the accompliſhment of cures, though reiterated experience might afford a probable preſumption of ſuch an event.

Were it not that inſcrutable cauſes are inſenſibly generating, and infinitely diverſifying the motive powers of animal life, the original ſimplicity and ordinances of Nature might be ſteadily manifeſted, and conſtantly recogniſed; every diſeaſe would then aſſume a relative identity of character, and every appropriate remedy would be univerſally applicable. But, unhappily, this primitive perfection is no longer to be found in the prevailing phyſical and moral degeneracy of mankind. It is in the motley group of deviations that judicious experience is to ſearch for medicinal efficacy, and to calculate the frequency of definite power.

When a medicinal ſubſtance promiſes to be extraordinarily ſalutary, it will be of the utmoſt practical moment to aſcertain the preciſe circumſtances in which its curative operation obtains,

tains, and the average chance under the ordinary diſſimilarity of conſtitutions for ſimilar effects to occur in different individuals; thus, if the powers of an agent ſhould ſo far tranſcend ſlight diverſities of temperament, as to induce a decided influence on the organic motions of life in a majority of inſtances, it will juſtify a well-founded preſumption in its effects; but yet will not warrant confident reliance. The language and expectation to be held on the power of medicine, ſhould be invariably attempted with doubt, which would ſuitably provide for every contingency.

Argentum nitratum can no more than other relatively active ſubſtances, aſpire to any higher character than that of poſſeſſing *casual power* only in the cure of Epilepſy; therefore, the peculiar temperamental and morbid circumſtances that favour its curative influence, and the probable frequency of their coincidence, conjointly conſtitute the whole of the practical knowledge that either poſſibly can, or need, be required to comprehend the ſcope and energy of its medicinal operation.

I am, &c.

R. KINGLAKE.

Chilton, ſuper Poldon,
April 3, 1801.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

A Work purſued with zeal, conducted with candour, and executed with ability, at once intereſts the reader, and claims his beſt endeavours toward its ſupport. Give me leave, in uniſon with multitudes of my brethren, to attach this character to your Journal; and in offering this equitable tribute to its merits, allow me to preſent to you for publication the following caſes, as ſamples whereby to judge in what degree this tribute ſhould be appreciated. I muſt firſt, however, felicitate the ingenious and liberal-minded of the Faculty on their having a mode of conveying their ſentiments to the world ſo favourable and ready as your Journal manifeſtly affords; ſeeing that they muſt be ſenſible, that it is a duty which they owe to ſociety (in return for what they reap) to make public, without reſerve and without delay, the harveſt of their labours, whether theoretical or practical, provided it tend to throw additional light on the nature and cure of diſeaſes.

The caſes treating of *Digitalis* are ſelected, on account of

medical practitioners being at preſent remarkably occupied about the operative and curative properties of this plant. The laſt caſe is communicated as being curious and extraordinary, not having, within the compaſs of my reading and recollection, a parallel in the records of Medicine. I am, &c.

Londonderry, March 31, 1801. W. PATTERSON.

CASE I.

Isabella M'Gowan, aged 24 years, admitted into the Hoſpital January 4, 1796, ſince the preceding September has been gradually growing melancholy and ſullen; is choleric and intractable with her kindred, but pacific and manageable amongſt ſtrangers; her countenance is gloomy and peculiarly glouting; pulſe regular; bowels natural; and, if ſhe do not ſleep, at leaſt ſhe lies quiet in bed at night. She had lain-in about two months before the approaches of mental derangement were noticed; ſoon afterwards her huſband emigrated to America, leaving her burthened with three young children; the breaſt-milk ſuddenly vaniſhed; and ſhe had diſputes with the huſband's relations reſpecting ſome property he left behind. She is not emaciated; ſays ſhe has no ailment; but her anſwers are generally very indiſtinct and incongruous.

A variety of medicines, as purges, vomits, bliſters, opiates, fetids, and mercurials to the extent of ſalivation, were employed with very little advantage from the time of admiſſion until the 11th of May following, when the uſe of *Digitalis* was commenced, and two grains adminiſtered, morning and night, till eight doſes were taken, without producing either viſible effect or operation. The doſe was gradually augmented, until it was brought to eight grains twice a day; but being withdrawn from the hoſpital at this juncture, no ſatisfactory obſervation could be made on the operation of the medicine, which, however, was continued at home, where, in a ſhort time, ſhe ſhowed ſigns of returning reaſon, which was reſtored by degrees, and which happy change her friends aſcribed to perſeverance in the employment of the Digitalis. This patient did not require a ſtrait-waiſtcoat.

CASE II.

Margaret Heney, aged 37 years, admitted into the hoſpital May 28, 1799, was delivered of a child ſix months paſt, and four days after delivery got a fright, which was ſucceeded by a tedious fever. About three weeks ago ſhe was attacked with

with infanity. Her pulſe is ſmall and ſlow; countenance pale and dejected; not furious, but very talkative; has ſome periods of rationality; ſpeaks on certain topics with tolerable ſenſe; and her memory is not much enfeebled.

As in the caſe of M'Gowan, fundry medicines were employed without material benefit during the ſpace of a month, at the end of which *Digitalis* was preſcribed, and near three grains were given morning and evening for thirty-nine days; in the courſe of which, two grains of opium, combined with calomel and antimonial tartar, were given at bed-time, to obviate ſleepleſs nights. Obſerving no curative effect from theſe meaſures, a large plaſter of cantharides was applied to the head, and four grains of opium were ordered at night; and as this alſo availed little, a drachm of etherial vitriolic ſpirit, mixed with forty gts. of tinct. opii, was directed to be given three times a day; and afterwards the ſcalp was covered with another bliſtering plaſter.

The patient was now taken home, and her friends were enjoined to give her at night, two grains of opium, in conjunction with three of afafœtida, and one and a half of calomel. In ſeventeen days a ptyaliſm was produced; ſhe ſometimes attended to domeſtic buſineſs, but in general was inattentive, and ſometimes outrageous. When the ſalivation abated, *ten* grains of Digitalis with ſix of ginger were ordered to be given three times a day. The 2d of October her huſband came to the hoſpital to report the effects of the preſcription, which, he ſaid, were really extraordinary. One or two doſes operated violently both by purging and vomiting, cauſed dimneſs of ſight and pain in the head, attended with ſuch extreme debility that ſhe thought herſelf dying, and at the ſame time declared that ſhe felt her ſenſes (as ſhe expreſſed it) perfectly reſtored, which her huſband affirmed was actually the caſe, whilſt under the influence of the medicine. But no ſooner did this influence decay than the derangement returned, accompanied with the ſame loquacious propenſity, and often with paroxyſms of rage.

Although the primary operation of the medicine was ſo deſperate, its uſe was cautiouſly continued until the number of doſes, eighteen, which had been preſcribed, were conſumed, but without producing equally lucid intervals. No farther report was received till the 13th of November, when circumſtances were recounted reſembling the preceding in moſt reſpects, except that the gleams of intellect were not ſo obſervable as on the firſt adminiſtration. Nine doſes of the herb were then given; and, having had no ſucceeding intelligence of the patient, I conclude that her reaſon was retrieved, other-

wife her friends, who were very ſolicitous to give her medicine, would not have ceaſed coming for ſupplies. This lunatic frequently required confinement in a dark cell, and ſometimes the coercion of a ſtrait-waiſtcoat.

CASE III.

The effects of Digitalis in the two preceding caſes, encouraged me to try it in the caſe of Cath. M'Dade, a married woman, aged about 30 years, whoſe derangement had ſubſiſted two or three years before her introduction into the hoſpital. When ſhe was brought to the houſe, a very imperfect account was given of her previous ſituation; but it then appeared, that her inſanity was very different from the melancholy ſpecies; for ſhe was garrulous in the extreme, prone to inceſſant dancing and ſinging, with a briſk penetrating eye, and a bold deportment, but not a miſchievous diſpoſition; always happy, and never complaining. Her appetite was good, and her ſleep generally regular. The only exciting cauſe of her malady that I could diſcover, came out when her reaſon was in ſome meaſure reclaimed, which was, as herſelf related, an imputation againſt her fidelity to the marriage vow.

Nearly three grains of Digitalis were adminiſtered thrice a day, for the ſpace of ſix days, at the expiration of which, tokens of returning reaſon appeared, but the operative effect of the plant could not be well aſcertained. However, the remedy was perſiſted in for ſome weeks, and the conſequence was a revival of rationality in as great a degree as her conſtitution will admit, by which ſhe is rendered capable of ſpinning, waſhing, and doing other ſervile offices in the houſe.

CASE IV.

In March, 1800, H. T. Eſq. aged 62 years, middle ſtature, wan viſage, ſpare ſhape, diligent, and much expoſed to cold and fatigue, had a ſharp pneumonic inflammation, from which he was reſcued by one moderate veneſection, a bliſter, calomel, purges, acetated ammonia, ſmall doſes of tartariſed antimony, gum arabic, diluting drinks, and vegetable aliment. Shortly after recovery from this diſorder, his feet began to ſwell when ſitting out of bed; the ſwelling ſoon extended half way up his legs, and in two or three days more, it proceeded to the trunk. On examination, the ſwelling in the lower extremities was found to be anaſarcous, and that in the body ſeemed to be of a ſimilar nature, as no fluctuation could be diſtinguiſhed in the cavity of the abdomen. He had not any thirſt; no paucity of urine, though what he paſſed was high coloured;

coloured; ſlept well; ſcarcely any cough; no pain in either ſide of the thorax; and his appetite, eſpecially for dinner, was pretty good.

The uſe of cryſtals of tartar, and the aſſiduous application of frictions, were then recommended, and purſued ſome days; but not being attended with ſufficient advantage, tincture of jalap was added to the cryſtals, ſo as to operate briſkly on the inteſtines, interpoſing between the purges, calomel, nitrat of potaſh, ſquills, ſp. ætheris nitroſi, bitters, and infuſions of horſe-radiſh, juniper berries, &c. By theſe means, the tumefactions were reduced in the courſe of two months, and he continued in tolerable health until the latter end of Auguſt, when ſymptoms of the ſame diſeaſe appeared anew, advancing in a pace not to be reſtrained.

On this occaſion of relapſe, not only were employed the generality of the former remedies, but alſo ſome additional ones, amongſt which were different forms of *Digitalis Purpurea*. The firſt preparation of it was the tincture, which was commenced the 9th of November, and which was ordered to be taken, at firſt, in the quantity of fifteen drops twice a day, increaſing five drops each doſe, till they amounted to thirty-five drops; and this number was at length given thrice a day for a few days. After the operation of a purge, an infuſion of the Digitalis was entered on, taking an ounce every ſixth or eighth hour. No advantage being gained by this preparation of the herb, another purge was taken, and a decoction of the freſh leaves was preſcribed; a large table ſpoon full every ſecond hour, for four, ſix, or more times, provided neither ſtomach ſickneſs, dizzineſs, vomiting, diureſis, nor purging would happen to curtail its exhibition. Though a ſenſible impreſſion was the conſequence of the firſt or ſecond doſe, he perſevered until four were taken, when he experienced vaſtly diſtreſſing affections, ſuch as heavy ſtomach ſickneſs, frequent vomiting, confuſion in the head, dimneſs of ſight, and ſtops in the action of the heart. The pulſe of courſe was very unequal and intermittent; there was a great drowſineſs; conſiderable debility; and, what I do not recollect to have before witneſſed, or heard of, as an effect of Digitalis, a moſt irkſome pain in the gums and teeth during ſome hours. The narcotic influence was ſevere for two days, after which it gradually retired, and the preceding general medicines were reſumed, with the addition of mercurial frictions, but with no better reſult.

At length, the tenſion and bulk of the abdomen becoming inſupportable, attended with ſymptoms of increaſing debility, the paracenteſis was performed the 29th of December; thirty-

one

one pints of fluid were extracted, and he underwent the evacuation without faintneſs in ſpirits or ſtrength. A few hours after the operation, a languor took place, and he continued in a flat, exhauſted alarming ſtate during twelve days, when he gained a little ground, and ſeemed likely to ſurvive ſome time. At this juncture, recourſe was had to preparations of ſteel, mineral alkali, muriatic acid, mild laxatives, &c. but the morbid accumulation in the abdomen advanced, notwithſtanding every endeavour to oppoſe it. His hopes were now greatly raiſed by extravagant encomiums that were laviſhed on a ruſtic noſtrum, the trial of which he therefore commenced, and perſiſted in the uſe of it ſo long, that the harbingers of ſpeedy diſſolution precluded the repetition of the palliative of tapping, and the mortal cataſtrophe happened the 7th of March, 1801.

CASE V.

Mrs. C——, aged about 40 years, a widow, of pale complexion, auburn hair, dark brown eyes, became in the winter, 1799, ſenſible of the beginning of an illneſs, which ſhe conſidered a common cold, and for which ſhe had recourſe to the advice of an apothecary, who treated her with the drugs commonly denominated pectorals. Under this adminiſtration ſhe continued eight or ten weeks, when I was required to viſit the unrelieved patient, and found her affected with quick and uneaſy reſpiration, frequent dry cough, frothy tenacious expectoration, quick wiry pulſe, impaired whimſical appetite, fits of vomiting, thirſt, and copious morning ſweats: but in no part of the thorax did ſhe experience or confeſs to feel any pain or ſtricture. My preſcriptions were principally one moderate veneſection, two ſmall bliſters, minute doſes of tartariſed antimony, ſulphuric acid, gum arabic, honey, oil, and as much animal nouriſhment as the palate and ſtomach would admit.

Proceeding ſeveral weeks on the principles which dictated thoſe meaſures, and ſeeing that no ground was gained, except by the diſeaſe, which rapidly advanced, I determined to try the virtues of Digitalis. Accordingly, as the ſtomach of this patient was delicate and irritable, I began, early in April, 1800, with twelve drops of the tincture twice a day, and gradually increaſed the quantity until it aroſe to eighteen drops, which produced ſuch diſorder in her ſtomach, that ſhe could not again be prevailed upon to take more than ten or twelve drops for a doſe; and ſoon refuſing to make trial even of this number, ſhe ultimately relinquiſhed this, and every other medicine, together with all medical advice. Indeed, there are juſt grounds for believing that this was a loſt caſe before

before I was called in, as the disease then assumed a formidable aspect, and yielded not a step to any effort made against its progress, but went on inflexibly until it consigned the sufferer, the middle of the following month, to the cold embraces of the king of terrors.

CASE VI.

June the 2d, 1800, Mary Smyth, aged 60 years, began to take Tinct. Digitalis, which she was directed to do thrice daily, thirty drops for each dose, in plain water. At this time she laboured under a desperate fit of asthma. Her breathing was extremely laborious, seemingly suffocating; her face bluish and bloated; the ends of her fingers were livid; pulse in the wrist scarcely perceptible, whilst the carotids throbbed most violently; hardly able to cough; expectoration nearly suspended; trunk of the body swelled; and the lower extremities very anasarcous. The first dose of the Digitalis assuaged the throbbings of the carotids, the second produced some diuretic effect, and the third caused a considerable flow of urine, so copious and so constant, that the patient was alarmed at the evacuation, whilst she was astonished at the complete and sudden reduction of the disease, done, as it were, by a charm. The medicine, at this juncture, produced so little stomach sickness, that she was able to pursue the use of it, without interruption, until about an ounce was consumed, at which time she was evidently convalescent, and shortly afterward, by means of diet, and a cautious use of the open air, her health was as fully restored as her constitution reasonably would admit.

Since that salutary change, she has had some threatenings of relapse, but the progress of these always have been checked by resuming the Digitalis, which, on these latter occasions, has induced more nausea and stomach affection than it did at first; consequently, at each of those latter administrations, the use of it was sooner suspended. In October, she was so well and strong as to be able to rise in the night, and act as a nurse-tender to a lying-in friend, without receiving any injury to her health from the exposure. In December, some threatenings of the dyspnœa induced her to resort again to the Digitalis, the occasional use of which keeps the disorder at bay. In February, 1801, she had an attack of the catarrhus senilis, from which she recovered so well as to be able at present to move about the house.

CASE VII.

Lieut. Col. R——, aged 28 years, middle stature, slim shape, sallow complexion, and liable to retrograde actions of the alimentary

mentary canal. I was called to viſit, June 13, 1800, and found him in bed, affected as follows: A conſiderable tumefaction and tenſion in the abdomen, principally in the epigaſtric region, attended with great ſenſibility on the moſt gentle preſſure, whilſt the region of the bladder, as he lay in bed, was in no degree diſtended nor painful to the touch; languor, faintiſh ſickneſs, when in an erect poſture; and conſiderable thirſt. The pulſe quick and unequal, generally ſmall, but ſometimes a few ſtrokes pretty round and full. Frequent deſire to diſcharge the contents of the bladder, but without any perceptible evacuation of urine, coagulated blood being the only apparent excretion, which was ſometimes voided in remarkable quantity when ſitting on a night-chair. The preceding day he had been expoſed to wet clothes, whilſt heated by field-exerciſe, after which he drank copiouſly of cyder and wine, (to which he was addicted) but without any of the meſs, in this inſtance, having heard him complain of a retention of urine. Thus inebriated, he ſallied forth to collect the regimental band, for the purpoſe of ſerenading; and, it is affirmed, that he attempted hoiſting on his ſhoulders one of his companions, to tap at the window of another officer, in order to get him to make one of the party. In the moment of this exertion, or ſoon afterward, it was repreſented that he grew extremely ſick, from which he ſhortly was relieved by vomiting. However, he was conducted to his lodgings in a very weak, oppreſſed condition, accompanied with a moſt profuſe ſweat, which continued ſome hours.

Mr. Purdon, ſtaff-ſurgeon of the diſtrict, an experienced practitioner, was now ſent for, and he drew a little blood from the arm, ordered an enema, and preſcribed a doſe of Oleum Ricini. Three or four hours afterward, I ſaw the patient, and finding that the oil was vomited, and the enema had no operation, whilſt the unſpeakable diſtreſs attending the above ſymptoms continued, I adviſed fomentations to the abdomen, and another veneſection; in conjunction with which, were directed ſtrong purgative pills, compoſed of ext. colocynth. comp. and calomel. Theſe meaſures produced no good effect; and accordingly, enemas were repeatedly adminiſtered next day, together with a ſcruple of calomel, given by the mouth in two doſes. A warm bath, by means of the ſlipper machine, was, on the third morning, employed, and borne very well, yet unattended with any ſervice; a bliſter was applied on the epigaſtrium; more cathartic pills were preſcribed; and ſtrong mercurial ointment was diligently rubbed in on the trunk and extremities. Theſe were followed by a variety of injections, oleagenous, fœtid, and ſtimulating, without procuring any evacuation of fæces; at length, upon giving one or two aloetic pills, a diſcharge of

fluid

fluid excrement commenced, and continued in the form of diarrhœa for ſeveral hours. Mucilaginous, oily, and ætherial preparations, with mild opiates, were occaſionally taken into aid; but, notwithſtanding the moſt ſedulous attention, and the moſt active treatment, he paid the laſt debt of nature in this ſublunary ſtate, in the afternoon of the 16th, in an eaſy, tranquil manner, as if life were abſtracted by a profuſe hæmorrhage.

The ambiguity in which this curious and intricate caſe was involved, led to a diſſection, which was performed next day, of that part only, the abdomen, wherein the diſeaſe appeared to be ſeated. On opening the peritoneum, there iſſued forth a conſiderable quantity of a fluid reſembling bloody ſerum, the greater part of which being preſerved, it was meaſured, and was found to amount to five quarts. The inteſtina tenuia, throughout their whole extent, exhibited a vaſcular redneſs on the exterior tunic, in ſome places to a conſiderable degree, which plainly repreſented a ſtate of inflammation, being manifeſtly different from any dye that might be imparted by the extravaſated fluid. The cæcum and head of the colon were highly inflamed, diſtended, and ſpotted with lividity; the reſt of the colon and appendicula vermiformis were healthy. The ſtomach, the liver with its appendages, and all the other abdominal viſcera, were perfectly ſound, except the *veſica urinaria*; on one ſide of the fundus of which was diſcovered an opening, about two-tenths of an inch, in each direction, with ſome extenuation of the coats in this ſpot, and conſpicuous marks of inflammation ſurrounding the rupture. This breach in the bladder, at once decides the nature of the fluid that eſcaped on the inciſion of the peritonæum, namely, that it was urine tinged with blood.

On this occaſion, ſome queries occur, which I ſhall put to your correſpondents, with a view to gain additional information, ſhould ever ſuch a formidable caſe come in my way hereafter. Was the malady curable? Or was it 'paſt all ſurgery?' Was it attended with any circumſtance conducting to a ſatisfactory diagnoſis? With reſpect to this laſt query, the reader may be reminded, as furniſhing a diagnoſtic ſymptom, that the patient being always examined in a recumbent poſture, no prominency was diſcerned in the hypogaſtric region, ſuch as indicates a bladder diſtended with urine from iſchury. Had examination fortunately been made in an erect ſituation, would not a ſagacious obſerver, combining this with the other particulars in the preceding recital, be led to form an adequate idea of the real cauſe of the calamity?

Hydrocephalus Internus.

In the Third Vol. of the Medical Journal, p. 113, commences a reſpectable communication, in which the author, Mr. White, of Bath, laments not only the frequent inſidious and equivocal nature of the ſymptoms of this diſeaſe, but alſo the oppoſite opinions reſpecting its proximate cauſe, which are ſtill entertained by medical writers. On this occaſion, I take leave to refer Mr. White to a ſmall Tract, which I publiſhed at Gilbert's Medical Library, in Dublin, in the ſummer of 1794, and in which he will find the characteriſtic marks of the diſeaſe pointed out, the proximate cauſe traced to inflammatory action, and other circumſtances relating to it, aſcertained in ſuch manner as might have unravelled and obviated the perplexities which he deplores, had the Tract fallen in his way. There he would have ſeen to whom we are indebted for the germ of knowledge concerning the nature of the malady; for the firſt hints of applying mercury in dropſical caſes as an agent on the abſorbent powers; for the early uſe of that mineral as a remedy in the febrile diſeaſes of children, attended with a *lethargic dulness* and *sleepiness*; and for its ſtill more early employment, in conſiderable doſes, as a purgative. There he will ſee, that the ideas aſſumed by Darwin, Beddoes, Ruſh, &c. were conceived, explained, and laid before the public, prior to the publication of the ſentiments of thoſe diſtinguiſhed phyſicians. Within the laſt ſix years, ſeveral more caſes and illuſtrations have occurred to the writer of this article, which he hopes to have an opportunity of publiſhing on ſome future day.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IF the following Caſe ſhould be deemed ſufficiently intereſting to merit inſertion in the Medical Journal, as giving a conciſe ſtatement of a diſeaſe not very frequently occurring in private practice, or terminating favorably, I ſhall feel myſelf happy in having communicated it. I am, &c.

Chelmsford, Feb. 12, 1801. GEORGE WELSH.

In July laſt, I was requeſted to attend a young married lady of delicate frame and habit, and who was far advanced in her

her pregnancy of a second child. Shortly after, I was sent to, and informed she had been unwell some hours, with trifling pains, which her friends were apprehensive would terminate in labour. Upon my arrival, I found the os tincæ open, and the head of the child low down, preceded by the membranes, which protruded in the form of a small bag, distended by the liquor amnii. As her pains had not been strong, but recurred at short intervasl, the os uteri had dilated gradually, and the labour advanced slowly; but by rupturing the membranes, the waters were evacuated, and her pains growing stronger, she was, in about two hours after, delivered. On dividing the funis to remove the child, I was extremely surprised to find the uterus completely inverted, and laying without the labia, on the thigh, with the placenta firmly adhering to its fundus; and my patient low and weak, with sickness and frequent fainting fits. I could not but feel sensibly the danger of her situation, of which I apprized her friends, and expressed a wish, that a friend of mine in the town, (Mr. Bird) who deservedly possesses the highest character for professional abilities, might be also employed; but as she declined any other assistance, I endeavoured to separate the placenta, which was soon effected, and as the vessels did not bleed much, the uterus was returned without any very considerable hæmorrhage; but as her fainting fits and sickness continued with a low and weak pulse, which was at times almost imperceptible, I directed a cordial draught to be given, with Tinct. Opii et Liquor Vol. Cornu cervi, aa. gts. xx. and in the course of a very few hours had the satisfaction to find her tolerably easy, more cheerful, and her pulse considerably stronger. On the following morning I saw her, and found she had passed a quiet night, though without sleep; had suffered but little from the after-pains, and was free from fever, but with great languor and debility: her sickness and faintings had not recurred. I directed a continuance of cordial medicines. The next day she was considerably amended, and easier; had slept during the night; had passed urine without pain, and did not complain of uneasiness in the parts. Her pulse was much stronger; and the uterine discharge not more copious than is usual; nor did she experience a much greater degree of inconvenience than generally results from labour to delicate women; but as she had not had stools, I directed an enema to de administered, which had the wished effect.

From this time she continued rapidly to mend; and by taking the bark in as light a form as her stomach would bear, was soon enabled to use exercise, and restored to her former state of health.

On enquiry, I learned the inverſion was to be attributed to a naturally lax habit, and the placenta having been too forcibly extracted at a former period,—a circumſtance I was not acquainted with till ſome days after her delivery.

I have the pleaſure to add, my patient enjoys good health at preſent, and feels no particular inconvenience from an accident ſo alarming, and to which ſhe will moſt probably be hereafter ſubject on thoſe occaſions.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

AFTER the very candid manner in which the utility of Cow-pock inoculation has been inveſtigated, it will appear, perhaps, ſuperfluous for me to trouble you with any additional obſervations; but as the following ſubject has long been the theme of diſcuſſion, and appears at preſent undecided, it may not be altogether improper to offer a mite of information on a ſubject ſo intereſting to the community.

It is nearly admitted as an axiom, that where puſtules have appeared in the Vaccine Inoculation, variolous matter has occaſioned them, and there have been ſome ſo illiberal and injudicious, as to cenſure the new inoculation on this trivial pretext. An extenſive practice has confirmed me in an opinion which I have long adopted, that it is immaterial whether the virus be taken from the inciſed part or from another puſtule, as the diſeaſe occaſioned by either proves (unleſs ſome manifeſt cauſe to the contrary exiſts in the conſtitution) equally benign.

It is a point of no ſmall importance to aſcertain the real cauſe of theſe eruptions; and having peruſed the publications of various gentlemen who aſcribe theſe appearances to the unknown introduction of variola, it becomes a ſubject not only curious but intereſting, to determine how it is, that matter taken from the teats of the cow, on *a new lancet*, or *penknife*, and inſerted with the ſame inſtrument, ſhall produce in five caſes out of fifty,* eruptions from ten to a hundred, &c.

On the other hand, ſeveral cautious and experienced ſurgeons have obſerved inſtances of Cow-pock eruption, when the infection has been taken from the animal and introduced in

* Practitioners in general, at preſent, inſtead of five caſes out of fifty, would ſay, *one case out of a thousand*, ſuppoſing the Inoculation done properly. ED.

in the moſt preciſe manner, and have declared themſelves ſufficiently ſatisfied that they aroſe from the introduction of pure Vaccine. I confeſs, I know not what to think on the ſubject and ſhall only relate a few inſtances that appear to merit your ſerious attention.

Case 1 and 2. Two of the ſervants of Mr. Butcher, of Steeple-Claydon, inoculated themſelves with matter from the cow. The uſual appearances ſucceeded; they had pain in the axilla, and conſtitutionl fever on the eighth day; and on the tenth, one of them had five or ſix eruptions on each arm, and a few more on the breaſt: the other had five only. Some of theſe eruptions aſſumed different appearances; for, on one ſubject, they were filled with lymph, and others were diſtinguiſhable by a variolous-like aſpect and circular inflammation, and ſcabbed on the fourteenth day.

Case 3. The ſervant of Mr. Roads, of Claydon, caught the infection by milking, and had the uſual appearances, with nearly twenty puſtules on one hand and arm.

Case 4. Mrs. Butcher, of Claydon, inoculated herſelf about three weeks ſince, from a girl who had received the diſeaſe from the cow; and I ſaw her arm about twelve days after, with a few complete puſtules on it.

Case 5 and 6. I inoculated Mr. and Mrs. Verney, of Stewkly, a few months ſince, with matter tranſmitted to me by Mr. Lawford of Layton, and both had eruptions.

Case 7. Mr. Turner's maid-ſervant, of Winſlow, was inoculated the 6th of March, and had in ten days five or ſix puſtules.

Case 8 and 9. I inoculated two of Mr. Sears's children, of Stewkly; and after, in the courſe of a few days, there was a conſiderable eruption on both.

Theſe are plain and important truths, and ſuch as muſt neceſſarily convince the moſt incredulous of the non-exiſtence of variola, and that theſe appearances are a concomitant of the genuine Cow-pock. I recollect when I ſaw Mr. Jenner, (nephew to the Doctor) at Tuſmore, I related to him one or two inſtances; and he obſerved, if I am not very much miſtaken, that he had witneſſed ſuch circumſtances from a deep inſertion of the virus. But there is a material difference between a raſh ariſing from cuticular inflammation and eruptions filled with a ſpecific virus capable of producing conſtitutional diſeaſe. Neither can they be ſuppoſed to ariſe from an inordinate uſe of the matter, or that too much had been introduced, although by many denominated the real cauſe; for there muſt be a certain quantity of contagion applied to produce conſtitutional affection; and it has never been found, either in the inoculation of the Small or Cow Pock, that the ſeverity of the diſeaſe depended on the quota inſerted, or that puſtules were to be attributed

buted to this cauſe. A ſufficiency to produce the diſeaſe muſt be applied, but its ſubſequent influence is explicable by very different circumſtances. It will not unfrequently happen that a ſurgeon may inoculate numbers without the leaſt appearance of eruption, and yet matter, however cautiouſly taken from either of the patients, will in ſome produce many eruptions; and it will occaſionally occur, that whole families inoculated with Small-pox will experience the diſorder in its mildeſt form, and vice verſa.

I confeſs, unleſs very ſubſtantial evidence is adduced to prove that eruptions are the effect of variola, (for at preſent nothing more than conjecture has been advanced) I ſhall ſtill heſitate, and from one very ſatisfactory reaſon. Allowing that by means unknown, a portion (be it ever ſo ſmall) of Small-pox virus has been introduced into the ſyſtem, and that the eruptions are Small-pox eruptions, how comes it to paſs, contrary to all received opinion, that this introduction of variola produces the diſorder—*free from contagion?* How can it be reconciled with common ſenſe, that a patient inoculated with Small-pox matter, and having puſtules, ſhall ſleep with another, be in conſtant ſociety, and yet never ſpread the diſeaſe? It cannot be ſuppoſed, becauſe Vaccine virus is blended with it, that it deſtroys contagion, the well known principle of Small-pox; there cannot be an intermediate, for either the diſeaſe is wholly variolous, or not at all; and if variolous, why not contagious; for if the leaſt quota of variola is abſorbed, and conſtitutional affection ſupervenes, no power can prevent infection. Neither in the caſes recited did the appearances on the arms juſtify the concluſion, for the incifed part bore the characteriſtic marks of pure Vacciola. It is but ſeldom in this part of the country that, previous to the inoculation for Cow-pox, any courſe of medicine is entered on; and perhaps no plauſible reaſon can be aſſigned why it is omitted. I do not pretend to determine the real cauſe of eruptions, I only *know* in the caſes alluded to, the Small-pox ferment never entered the fluids; but I think it not altogether improbable that they may be partly occaſioned by certain circumſtances of the ſkin that determine an undue quantity of the Cow-pock matter either to remain or paſs through, and that purgatives, by diminiſhing the determination, may have conſiderable influence in preventing their appearance. In fact, it is more conſiſtent with common obſervation to ſuppoſe that ſanguine plethora, free living, and too great proportion of ſtimuli may, in conjunction with cauſes hitherto undiſcovered, have produced eruptions, than the common conjecture of Small-pox influence.

I am, &c.

Winslow, April 6, 1801. J. H. GROSE.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

I Think it a duty at this period, to diffuſe as widely as poſſible every circumſtance which can tend in any degree to throw light on ſo important a ſubject as the Vaccine Inoculation, and thereby contribute either to remove the prejudices or confirm the opinions of thoſe who oppoſe its introduction. I am induced by this conſideration to ſend you the following account, and requeſt that you will give it a place in your Journal.

On Monday, the 12th ult. I was ſent for to the wife of Robert Baker, near Newcaſtle-under-Lyne, whom I found affected with the Small-pox, and in the ſeventh month of her pregnancy: The eruption, which was very copious and univerſal, firſt appeared upon the preceding Thurſday, the day on which I ſaw her being therefore the fifth day of its appearance. As ſhe had two children who had not had the Small-pox, I conſidered it as a fair opportunity of putting to the teſt the preventive power of the Cow-pock, and immediately inoculated them with Vaccine matter. As the Small-pox frequently proves fatal to pregnant females, it may not be amiſs to obſerve, that in Mrs. Baker's caſe, (though ſhe was very much loaded) there were no alarming ſymptoms, and that ſhe is now completely recovered. The inflammation and ſuppuration went on in the inoculated parts with perfect regularity, attended with ſcarcely any perceptible indiſpoſition, and one of the children complained of conſiderable tenderneſs in the axilla. They both lived in the ſame apartment with their mother during the whole progreſs of her illneſs, and on the 23d and 24th, (the 12th and 13th days after inoculation) I was ſomewhat alarmed for the credit of the Vaccine Inoculation, (on which I placed the fulleſt reliance) by the appearance of ſymptoms in both children, reſembling thoſe which take place at the approach of Small-pox, viz. ſickneſs, thirſt, head-ache, laſſitude, &c. On the 25th theſe ſymptoms totally diſappeared, but recurred upon the 28th, on which day and the following, about ſixty eruptions appeared upon one child, and about twenty on the other, which eruptions exactly reſembled thoſe of Small-pox in every reſpect, excepting that they arrived at maturity on the 30th, being the third day of their appearance. From the time of their firſt appearance the children have been free from complaint.

From the above facts, it appears probable, that the Vaccine Inoculation had produced a change in the ſyſtem, though not ſuch as completely to prevent the influence of the variolous contagion,

contagion,* yet sufficient to mitigate the violence of its effects, and indeed to occasion the disease to deviate from its natural progress. I am, &c.

Stoke-upon-Trent, Feb. 11, 1801. E. BEVAN.

To the Editors of the Medical and Physical Journal.

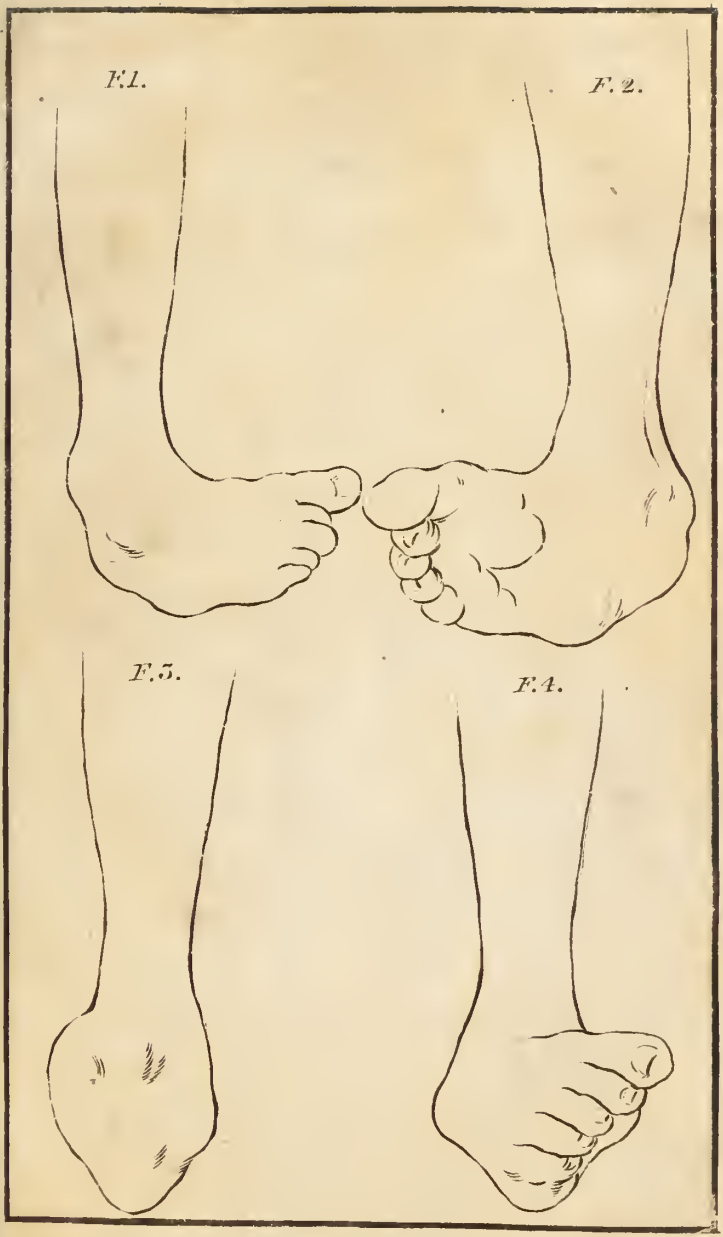
GENTLEMEN,

IN May, 1800, J. Haythorne, Esq. of Bristol, consulted me about his daughter, of whom he gave the following account.

She had been healthy from her birth till about the age of two years, when she had a fever, and at the same time lost the use of all her limbs by (as it was supposed) a paralytic stroke. From this she recovered; but it was soon observed that the right foot was weaker than the other. As she grew, this defect continued to increase; the foot became weaker, and deformed to such a degree that at last she had no power to use it; at least, it had no capacity for voluntary motion: it became rigidly fixed in its deformed state, with much tendency to increase in deformity, in consequence of the very imperfect manner in which she was able to walk about. The left leg and foot began to assume the same appearances, though in a less degree; electricity, the Bath waters, &c. and every means that could be devised to obviate or diminish this defect, had been tried without effect, for it increased so much that at last she could not walk across the room without being led by an assistant and supported by a stick; she began to grow distorted from the pelvis upwards; and as every circumstance of the disease was rapidly increasing, without any well-founded expectation of restoring the form and powers of the parts, application was made to me, to contrive some means of preventing her from getting worse, and, if possible, of enabling her to move about in the situation she then was.

At this time the right foot was, (as supposed) in consequence of permanent contraction of the tendo achillis, so drawn downwards that the ball of the great toe, the heel, and the calf of the leg were in a direct line with each other; the foot, by the apparent contraction of the plantar aponeurosis, was much shortened, and rendered hollow on the bottom and the inside; the great toe was drawn up and permanently shortened; the circular head of the astragalus was out of its natural situation, and

* We think that this eruption was not variolous. ED.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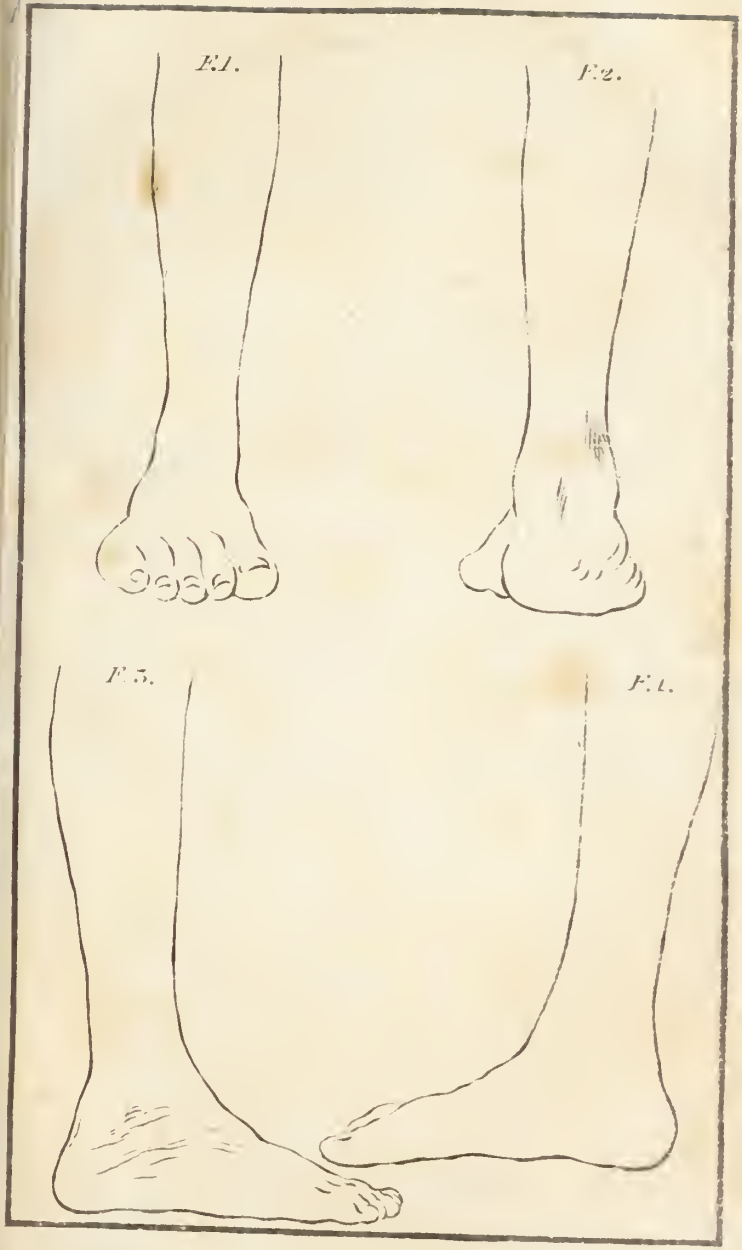
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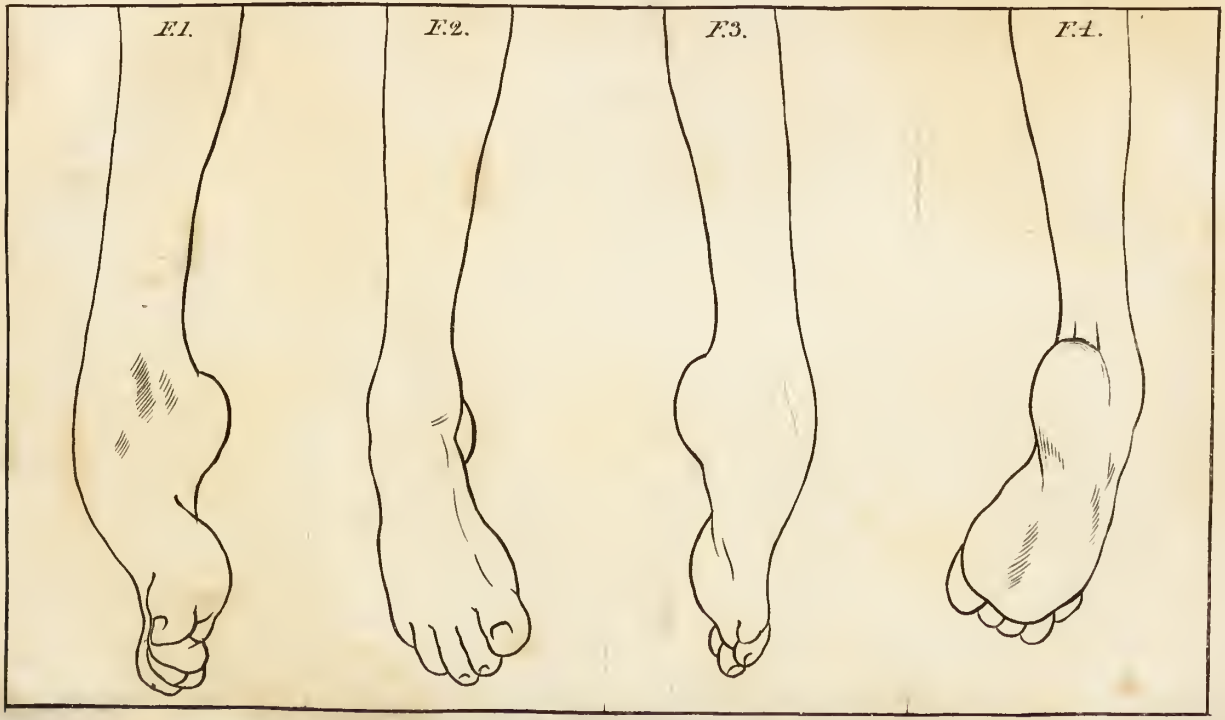

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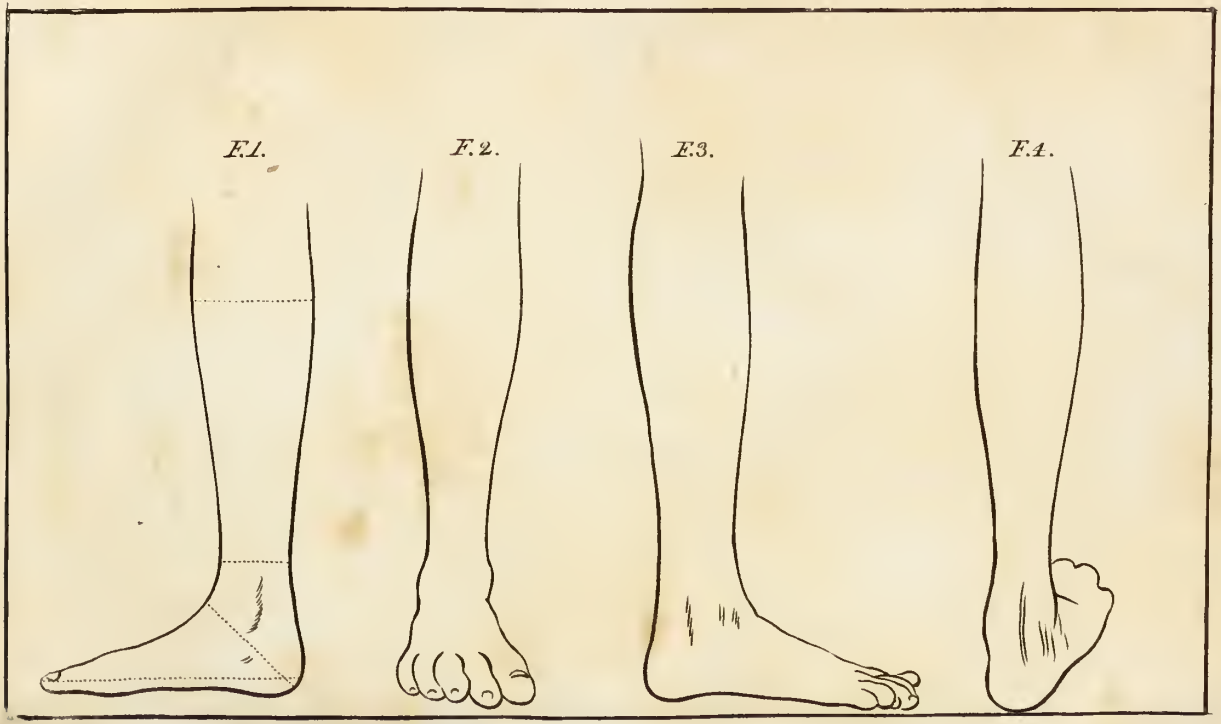

and lay in a direct line with the front of the leg; the toes were turned inwards, so far, that when she attempted to stand or walk, she rested upon the nails of the three middle toes, as the great toe did not touch the ground: In consequence of this state of the foot, every attempt she made to walk or stand upon it tended to increase the deformity; the leg was flaccid, much wasted, and she was not conscious of any degree of sensibility either in that or the foot. At this time I had a cast in plaster of Paris made from the foot, in presence of Mr. H. who observed, that the workman placed the foot as near the natural position as it was possible to be in when he made the mould; from this cast I made four views, in different directions, which are in the annexed Plate 5, and will give a correct idea of the state of the foot at the time.

The left foot had made so much progress towards the same state, that, in any other patient, it would have excited considerable alarm; but in this was scarcely considered, or at most only as secondary in point of consequence to the other. Both the knees bent inwards, and the distortion that was beginning to take place above the pelvis, had as yet produced no permanent deformity; and as it was merely the effect of peculiar positions occasioned by the deranged action of the legs, it was at this time not an object of attention.

Mr. H. when he applied to me, had no expectations of obtaining more than palliative relief; but, in consequence of my opinion, was induced to place her under my care, to see what could be effected towards obtaining a cure. Before the end of the first week that she was under my care, she felt a warm sensation pervade the whole of her right leg, which till then had not evinced the least sensibility; and this sensation became so permanent, that much attention was requisite, during the progress of the cure, to prevent it from becoming excessive; the form of the foot soon underwent a material change, and continued to do so progressively till last December, when she was able to stand flat on the sole of her foot; and while standing upon it, there was little in its appearance to distinguish it from the foot of any other person.

At this time I had a second cast made from the foot, and from this cast I have made the four views represented in the annexed Plate 6, viz. Fig. 1, a profile view of the inside of the leg and foot; Fig. 2, a front view of the same; Fig. 3, a profile view of the outside of the leg and foot; and Fig. 4, a back view of the same. In making the drawings represented in Plate 5, I placed the LEG in the same situations as the leg in Plate 6, consequently, by comparing the feet in each plate with those marked with corresponding numbers in the other, a correct opinion may be formed of the alteration produced in the

form and appearance of the foot at the different periods when the casts were taken.

A circumstance at least as remarkable as the alteration in point of form, is the increase of size in the whole limb that has taken place during the time that has been employed in the cure; partly by the alteration in point of form, which is the consequence of reducing the foot to its natural state, but more by the absolute increase of size in the whole limb during the progress of the cure. To show what this has been, I subjoin an accurate measurement of the two casts, and have marked with a dotted line on Fig. 1, plate 6, the direction in which these measures were taken, viz.

	Diseased Foot.	*Restored Foot.*
Length of the foot,	6 $\frac{1}{4}$ inches,	7 $\frac{3}{4}$ inches
Breadth of the foot at the toes,	3 inches,	3 $\frac{1}{2}$ inches
Circumference at the toes,	7 $\frac{1}{2}$ inches,	8 $\frac{1}{2}$ inches
Over the instep and round the heel,	9 inches,	10 $\frac{1}{4}$ inches
Smallest part of the leg,	5 $\frac{1}{2}$ inches,	6 $\frac{1}{8}$ inches
Largest part of the leg,	8 $\frac{1}{2}$ inches,	9 $\frac{1}{2}$ inches

Extraordinary as these circumstances may seem, as the models were taken in the presence of Mr. H. and other persons equally respectable, and as they are still in my possession, it will always be easy to prove that these circumstances are incontrovertible facts. As the reduction of the foot to this state is the most striking part of this case, it was my intention to send the history of it at this period; but as other avocations have prevented me from doing so, I have an opportunity now to add, that though so much alteration in point of form cannot take place since the period when the last model was taken as did before that time, yet minuter alterations have taken place so fast, that I am now warranted in saying, this foot will be perfectly restored to its natural form, and that no one circumstance will remain to show that it has been distorted. I might perhaps be justified in saying as much of the restoration of its natural powers; but as I would avoid the imputation of rashly advancing too much, I shall content myself with stating the fact, that she has lately been able to walk three miles without inconvenience; and when it is remembered, that ten months ago she could not go so many yards without assistance, and as she is mending rapidly every day, I shall leave every one to form his own conclusions on the subject.

I have said nothing of the left foot; for, although, if it had been the only one diseased, it would have been an object of importance, it was but very little distorted in comparison with the other, and it is now sufficient to observe it is equally recovered; the tendency to a distorted spine too, in consequence of the alteration

alteration in the legs, has disappeared without requiring any assistance, though if the distortion of the legs and feet had continued, it is certain that very serious incurvation of the spine would have taken place.

As I wish to avoid every imputation of exaggerating any circumstance of this case, it is necessary to add, that I transmitted the above Narrative to Bristol, and have received the following letter from Mr. H. in reply.

" To Mr. SHELDRAKE, No. 50, Strand.

" Dear Sir,

" I have forwarded by the mail coach of this day, your Narrative of my daughter's case, which I have perused with the most affectionate interest, and confirm in its fullest extent, heartily wishing its publication may excite general attention to your important and invaluable discovery. I congratulate you and myself that this case, so happily treated hitherto, and promising complete success in the event, will establish your claim to the approbation and applause of all mankind. I am extremely concerned that this wonderful case cannot be farther confirmed by the testimony of that worthy gentleman* who was the cause of my placing the child under your care; his professional character, no doubt, would have had great weight; he had seen the first and second models, and, on that proof of advantage gained, encouraged me to hope the cure would be complete; had he lived to have seen the last, I am convinced he would have been happy to have had this opportunity of offering this public acknowledgment of your merit, in conjunction with, " Dear Sir,

" Your obedient friend and servant,

Bristol, 14 April, 1801. " JOHN HAYTHORNE.

" P. S. I beg you will refer any person desirous of seeing the models in this part of the kingdom to me; and, in case another is taken for yourself, that I may have one also."

If the above case was an anomalous one, in which the effect of some lucky experiment had proved beneficial to the patient, I might now take leave of it with those sensations that naturally will arise from the consciousness of having been serviceable to others; for as no situation can be more powerfully contrasted than that of this patient, ten months ago, when she was almost helpless, and had no other prospect than that of increasing

* The late Mr. Townsend, surgeon, of Bristol, who is recently deceased.

ing debility and its conſequences, with that in which ſhe is at preſent, almoſt reſtored to the full uſe of her powers, with life and all its proſpects opening before her; ſo the reflection of having produced the alteration would be ſufficiently gratifying: But as this is one very ſtrong example of a very numerous claſs of diſeaſes, few caſes of which have been radically or even palliatively cured, and as the ſucceſs in this caſe was the conſequence of an accurate inveſtigation of the alteration produced in the parts by whatever cauſed the diſeaſe, and a minute and laborious application of the means requiſite to reſtore thoſe parts to their natural ſtate, and as the ſame principles, if ſkilfully adapted and ſedulouſly applied to the many varieties of the ſame diſeaſe, will, in all probability, prove equally ſucceſsful as it has done in this, I truſt I ſhall be excuſed for adding a few obſervations on the ſubject.

We continually hear of what are called contractions of the limbs, ariſing, in all probability, from many different cauſes; connected, it is equally probable, with very different ſtates of the parts: yet the opinions of profeſſional men are not ſo far ſettled as to point out any general ſyſtem upon which they may be treated with a probability of ſucceſs; while the empiric, who perhaps has known ſome benefit produced by ſome remedy in one caſe, boldly applies the ſame remedy in all caſes that he he is pleaſed to call by the ſame name, and thus goes on, promiſing much good, and doing no little miſchief, till he is at laſt ſunk in oblivion. It is in order to reſcue the ſubject from this ſtate of confuſion that theſe obſervations are written; and I therefore hope, if they ſhould not be ſucceſsful, the attempt will be excuſed, and ſome more fortunate and more able hand be prompted to do juſtice to the ſubject.

What is a contracted limb? To ſome this queſtion may ſeem unneceſſary; but as I wiſh to define, accurately, the data upon which I mean to argue, I ſhall be excuſed for obſerving, that by the term contracted limb I underſtand *only* that which, by the ſpaſmodic action of one or more muſcles, or by the loſs of ſubſtance or alteration in the natural texture of ſome muſcles or tendons, is drawn into and firmly fixed in an unnatural poſition. Of this claſs of diſeaſes, the cramp and its conſequences may be mentioned as cauſes much in point.

When, in conſequence of exerciſe unuſually violent, and continued for an uncommon length of time, the legs become fatigued, and the patient lies down to reſt without properly guarding himſelf from the effects of cold, the gaſtrocnemii muſcles ſuddenly and violently contract themſelves, and forcibly draw the feet into a peculiar poſition, in which they become fixed, and this is attended with excruciating pain to the ſufferer, which is much increaſed by any forcible attempts to reſtore them

them to their natural position. It is easy to see, that if this effect was permitted to continue for a long time, the motion of the feet must cease; the pain in the contracted parts would diminish as they become accustomed to their situation, and, at last, would totally cease, except when any attempts were made to force them into action. It is likewise easy to see, that if this effect was continued for a longer time, such an alteration might take place in the organization of the contracted muscles or tendons, as would constitute an irremediable disease. The rational mode of curing this class of diseases in their early stages, and attempting to cure them in their more advanced ones, would be the use of the warm bath and such applications as can relax the parts, and mechanical applications or efforts to bring those parts into action in proportion as they become relaxed; but it is extremely probable, that if a positive alteration had taken place in the structure of the contracted parts, that this system of treatment would produce no benefit whatever; that if incautiously practised it would produce much pain; and if by misfounded fortitude in the patient, or imprudent perseverance in the operator, it was continued to excess, great inflammation in the parts might take place, and very serious consequences might ensue, without the possibility of obtaining any advantage to compensate the risk.

Of the success of this mode of treatment, when it is successful, it cannot be supposed that I should know much, for it is not connected with my practice, and patients who have been relieved by it, need to seek no farther assistance; of its failure in those cases in which I have said it is very unlikely, if not absolutely impossible, that such treatment should succeed, I have much information; and I must add to this, that I have no knowledge of any means by which such contractions as are occasioned by alteration in the structure of contracted parts can be cured. Of this class I shall briefly mention two cases out of the many that have fallen under my observation.

A gentleman in India went to sleep very imprudently in an exposed situation; he waked in excruciating pain from the cramp; the flexor muscles of the thigh and leg were so contracted, as to bend the leg into the position it usually is when we sit down, and in this position it was permanently fixed. All attempts to remove the contraction were ineffectual; he returned to England, and sought for assistance here without success, and at last applied to me. As every thing that could be done under the idea of relaxing, &c. had been tried, and as it appeared to me to be a case of permanent incurable contraction, I was not willing to make any attempt, but advised that he should try, by means of an assistant, whether the parts could be brought to act in any manner; these attempts, however, were attended

attended with such excruciating pain, that they were soon discontinued, and the patient remains in the same state as when I saw him first.

In the year 1795, I was called to the son of a gentleman in Ireland; there was a general tendency to contraction in all the flexor muscles of the thighs, legs, and feet; when he lay down, his knees were drawn upwards, and his toes pointed strait forwards; when he attempted to walk, it was only by holding a table or the chairs, and upon his toes, with his knees bent. The warm and vapour baths, electricity, fomentations, and relaxing applications had long been tried, it was said, with good effect, and I was asked to contrive such instruments as would extend and keep the limbs extended in proportion as the applications that were used would enable the parts to bear extension. I did so, and the plan was followed with much perseverance, and for a great length of time; but at last all the remedies were thrown aside, as no benefit was derived from them; and if the patient be still living, I conclude he is in the same condition as when I first saw him.

By these and many other cases that have fallen under my observation, I am authorised to say, that although the use of relaxing applications may cure some cases of contraction (adhering to the definition I have given of the term) yet, in general, they are ineffectual, and a successful method of curing those diseases is still a desideratum in surgery.

To those limbs which, like that of Miss H. are fixed in one position, and which are not distorted by contraction, in the sense I have used that word, I would apply the term rigid, as indicating their condition, without specifying the cause of it; distorted limbs of this kind may be occasioned by many different causes, among the most frequent of which are the following, viz. Luxation of joints, &c. which by weakening the connecting ligaments and particular muscles, alter the position, and derange the natural action of the limb, and thus throw it into an improper situation, in which, at last, for want of proper action, it becomes permanently fixed. In consequence of palsy, when, upon the removal of that disease, due care is not taken to place the limb in that situation which is most favourable to enable it to regain its natural powers; and many others, which as their effects are exactly the same, it is needless to particularise here.

The capacity for muscular motion in any limb depends upon the exact proportion of the power of the flexor and extensor muscles to each other, by which means it is enabled to perform its functions with propriety; of course, by whatever means the powers of those two sets of muscles are rendered unequal, derangement of its action, and deformity in its shape, must

muſt be the conſequence; that inequality, once eſtabliſhed, will continue to increaſe till the action of one ſet is deſtroyed, and that of the other will ceaſe of courſe; the limb will be motionleſs, loſe its flexibility, and diminiſh in ſize, its ſenſibility will become latent, and, at length, the whole limb be reduced as near to a lifeleſs ſtate as a part of the living animal can be. Such was the condition of Miſs H's foot; ſuch is the condition of many limbs called *contracted*, which are improperly treated, and finally abandoned in deſpair; when, by a different mode of treatment, they might be reſtored to their priſtine vigour.

As this is a point of much importance, I ſhall perhaps be excuſed for proceeding a little farther upon it. If this diſeaſe is called contraction, and it is treated with what are called emollient or relaxing applications, what will be the conſequence? The original cauſe of the diſeaſe is debility in particular muſcles; and it certainly is not eaſy to conceive how the application of relaxing remedies to parts which have loſt their power of acting from mere debility, can reſtore thoſe parts to their natural ſtate; it is eaſy to underſtand that the application of theſe remedies muſt be, at beſt, uſeleſs, when adminiſtered in every poſſible form, if they did not accelerate the progreſs of the diſeaſe; thus, by calling that diſeaſe contraction which in fact was debility, a method of treatment was adopted which was not adapted to the nature of the diſeaſe; and when it is conſidered how many ſimilar caſes there are which are treated upon the ſame principles, and with preciſely the ſame reſult, this attempt to place the ſubject in its proper point of view may not be found unneceſſary to future ſucceſs.

The leading principle upon which I acted in this caſe, and which, I believe, will prove ſucceſsful, if ſkilfully applied, in every other that is not in its nature incurable, was to reſtore the powers of thoſe parts which had loſt them as the diſtortion came on, from a perſuaſion that, if this could be done, the form and action of the whole limb would be reſtored of courſe. I am aware that this has been attempted by electricity and other means, though not with ſucceſs, I therefore merely mention the circumſtance, as it might ſeem invidious to enquire minutely into the cauſes of failure when thoſe means have been employed.

I had learned, in the ſchool of Mr. Hunter, that muſcular motion, artificially excited, would in time produce or reſtore muſcular power; to the diſcovery of the principle on which theſe diſeaſes ſhould be treated, then, I have no claim; but the merit I am entitled to, if it deſerves the name, is that of having contrived the means of reducing this principle to practice, in

in the cure of a very numerous claſs of diſeaſes, and to any degree that may be required.

This caſe of Miſs H. has been called paralytic; if it was ſo, then is this method to be called a cure for palſy; but there is abundant reaſon to believe that if palſy was the primary cauſe of this debility, and its conſequent diſtortion, *that* palſy had long been removed, and all the effects I ſaw were merely the effects of debility; it is not a little ſingular that the ſenſibility of which this leg had been ſo long and ſo compleatly deprived, as to give riſe to a notion that it laboured under the influence of palſy, ſhould be ſo compleatly reſtored in a few days, that much attention was requiſite during the progreſs of the cure to prevent its becoming exceſſive; the increaſe of ſize too, notwithſtanding the conſtant application of the bandages, &c. neceſſary to effect the cure is ſo very remarkable, that it requires every voucher of its authenticity to be carefully examined before implicit credit will be given to the account of it.

If any ſhould object that I go too far in arguing, from the cure of this caſe, that every other caſe of the ſame deſcription may as certainly be cured, I ſhall beg leave to obſerve that the greateſt certainly includes all the leſs, and many caſes of the ſame kind, but leſs in degree, I have had under my care, ſucceeding equally with them all; I believe too it is fair induction to ſay, that if there are worſe caſes of the ſame kind, it is very probable, nay almoſt certain, that the ſame means, if duly proportioned, and ſedulouſly applied, will certainly cure every caſe, however bad it may be, till it arrives at that point which oppoſes ſome phyſical impoſſibility to prevent our ſucceſs.

At what period that impoſſibility may take place it is not eaſy to ſay, though it certainly does not ſo early as it has been ſuppoſed; and it is extremely probable it will be much later in life, and much leſs frequently, than many will imagine. As it is of conſequence that this doctrine ſhould be firmly eſtabliſhed, I ſhall perhaps be excuſed for ſupporting it by referring to a quarter from whence information on this ſubject might not be expected.

A late author,* in deſcribing the extraordinary mortification of a devotee, ſays, "The compleat term of his firſt penance being expired, the next he undertook was to hold his hands, locked in each other, over his head, the fingers of one hand dividing thoſe of the other, for the ſame ſpace of twelve years. —When I firſt ſaw him at this place, in the year 1783, he rode on a piebald Tangun horſe from Bootan, and wore a ſatin embroidered

* Turner's Embaſſy to the court of the Teſhoo Lama.

embroidered dreſs given to him by Teſhoo Lama, of which he was not a little vain. He was robuſt and hale, and his complexion, contraſted with a long buſhy black beard, appeared really florid. I do not ſuppoſe that he was then forty years of age. Two Goſeins attended him, and aſſiſted him in mounting and alighting from his horſe; indeed, he was indebted to them for the aſſiſtance of their hands on every occaſion; his own being fixed and immovable, in the poſition in which he had fixed them, were of courſe perfectly uſeleſs.

" *The circulation of the blood ſeemed to have forſaken his arms, they were withered, void of ſenſation, and inflexible; yet he ſpoke to me with confidence of recovering the uſe of them, and mentioned his intention to take them down the following year, when the term of his penance would expire.*

" Other Goſeins aſſured me, *though I could not help doubting the fact*, that it is practicable to reſtore withered limbs, thus circumſtanced, to perfect uſe. This is effected, they ſay, though not without great labour and ſome pain, by means of long continued friction, before a large fire, with a certain ointment which they compound."

The authority of theſe Goſeins is not to be very highly eſtimated as to the ſurgical treatment of the diſeaſe, though they may ſafely be admitted as evidences to the fact mentioned by Capt. Turner. The appearance of the man ſo crippled is not mentioned as unique, it is ſtated, and indeed known, to be the regular practice of a certain deſcription of perſons who profeſs the ſame religion; and though it is a ſpecies of ſuperſtition, it is not of that gloomy kind which has led many to deſtruction, but, with the calmneſs of miſtaken philoſophy, that man willingly rendered his arms uſeleſs for twelve years, from a belief that the ſacrifice will be grateful to his Deity, and a conviction that at the expiration of the time mentioned in his vow, he *can take them down again, and recover the perfect uſe of them.* His countrymen likewiſe believe this, and ſtate the means by which it may be done, not as a matter of doubt, but as of the moſt abſolute certainty, and, undoubtedly, not without ſufficient reaſon.

There are no practices more antient than the ſuperſtitions of India; they have been invariably followed, without the leaſt deviation, for a ſeries of ages, of which perhaps we have no adequate idea; and it reſults from our knowledge of the facts mentioned by Capt. Turner, that perſons at the preſent time do what has been regularly done by their countrymen for time immemorial, render their arms uſeleſs for the term of twelve years, and at the end of that term reſtore them to their original perfect ſtate. Capt. T. doubted the fact, becauſe he had

no knowledge of any thing ſimilar, yet the terms in which he deſcribes the man's *arms*, if the word *leg* was ſubſtituted for it, would be very deſcriptive of Miſs H's leg; the cure of this is within our knowledge, and juſtifies us in believing what is related of this man by Capt. T. which again will juſtify us in concluding that many perſons with the ſame kind of defects, and much farther advanced than that of Miſs H. is, may be perfectly cured by the ſame means that were employed in curing her.

Mr. H. in his letter calls this a wonderful caſe; others, who are not equally affected by it, may call it an extraordinary one. As I do not wiſh for the reputation of working miracles, and am deſirous to ſubject what ſeems to be extraordinary to the judgement of thoſe who are competent to decide upon it, I ſhall ſtate what appears to me to be the progreſs of a limb in the condition this lady's was, from the healthy to the diſeaſed ſtate, and on its return to the healthy ſtate again.

In conſequence of weakneſs, from whatever cauſe, the extenſor muſcles of the foot were incapable of performing their functions properly; the contractile action of the flexors was of courſe increaſed, and the foot thus drawn into an unnatural poſition; this derangement, deformity, and rigidity increaſed till ſhe had no power to uſe the leg; in this ſtate it diminiſhed in ſize for want of action, and loſt its ſenſibility from the ſame cauſe. In this ſtate it was called a *contracted leg and foot*, and every application made to it, inſtead of curing, only increaſed its debility, and at length it became uſeleſs.

Having formed a different opinion of it, I avoided all the farrago of emollients, &c. as I would have done the ointment of the Goſeins, and confined my treatment to the application of bandages, conſiſting of ſprings ſo adapted as to imitate the action of every muſcle whoſe power was deficient, and by altering, adapting, and modifying theſe applications, ſo as to produce the action of every muſcle in its turn, I proceeded by degrees till the foot was reduced to its natural form, and ſo much of its natural powers reſtored, as leaves a well-founded hope that every the leaſt appearance of diſeaſe will be exterminated.

The phyſical alteration in the ſtate of the parts ſeems to have taken place in the following manner: By applying a ſpring to draw the foot towards the ſame poſition in which it would be placed by the action of any particular muſcle, that muſcle is brought to act though it had not before the power to do ſo; and, in conſequence of this action, the general circulation is increaſed through the whole limb; the conſequence of this increaſed circulation is enlargement of the veſſels through which

which the fluids circulate, and of courſe an increaſe of ſize and ſenſibility in the whole limb. The application to produce the action of every muſcle muſt be changed and varied according to the feelings of the patient; but, however it may be neceſſary to vary theſe applications, the general action of the limb is perpetually kept up, and if duly regulated, the reſtoration of feeling, ſize, ſhape, and, finally, the natural power of action is completely and permanently reſtored.

I am, &c.

Strand, April 20, 1801. T. SHELDRAKE.

On the Chemical Analysis of Vegetables. By Dr. HERMBSTAEDT, *of Berlin.*

[Continued from our laſt, p. 368.]

On the Separation of the Sulphat and Muriat of Kali or Potash.

THESE neutral ſalts, if contained in any plant as component parts, are beſt obtained by incinerating a certain quantity of it, and burning the aſhes in an iron pan till they become quite white, and afterwards mixing, and perfectly extracting them with water, and paſſing the fluid through a filtrum. The lye, which is in this way prepared, muſt be ſaturated with diſtilled vinegar, and entirely evaporated. The remaining dryneſs is to be digeſted with alkohol, which takes up all acetated kali, leaving the neutral ſalts that are formed with the mineral acids undiſſolved. By diſſolving the reſiduum in water, and chryſtallizing it, the ſalts ſeparate from each other; or in caſe there exiſted only one of them in the plant, the ſeparation of this will ſtill better ſucceed.

On the Analysis of the Vegetable Fibre, (Fibra Vegetabilis.)

After having extracted a plant by every poſſible diſſolvent, and by that means freed it from its component parts, the vegetable fibre remains behind, as a taſteleſs, ligneous ſubſtance, which ſeldom contains any ſaline particles, as theſe are generally extracted with the other parts by the different operations to which the plant has been expoſed. All that is to be attended to in the analyſis of the vegetable fibre, is to determine the earthy particles, and the carbon which are contained in it; and the analyſis is accordingly beſt performed in the following manner:

1. Put a certain quantity of the vegetable fibre that has been

perfectly dried, into a coated glass retort, to which is joined an adopter or receiver, from the extremity of which issues a pipe, into which a curved tube is received that is conducted into a bason with water, for intercepting any gasiform fluid that may be disengaged.

2. Place the retort into a reverberatory furnace, and apply heat at first gently, but augment it by degrees till the retort becomes red-hot, and no more vapour or gasiform fluid rises.

3. The quantity of gas that is obtained, may be determined according to cubical inches.* The glass in which the gas is received, is put with its opening into a vessel full of good lime water, in which it is suffered to stand till no more gas is perceived to rise.

4. By subtracting the quantity which the air in the glass has been diminished, from the whole former mass, it will be found what quantity of carbonic acid gas was mixed with it, which has been absorbed by the lime water.

5. The remaining gas is generally hydrogen, the quantity of which may be known by the previous diminution.

6. It is seldom the case that any fluid is found in the receiver, but when this happens, it is only a little empyreumatic oil, or empyreumatic acid. The residuum in the retort is the vegetable fibre changed into a black coal.

On the Quantity of Carbon contained in the Coal.

If the weight of the remaining coal be subtracted from the weight of the vegetable fibre that has been examined, it will be found how much of the heterogeneous particles has been lost. Put now the remaining coal, after having accurately weighed it, into an iron pan, and let it burn with the access of air till all black colour disappears. By weighing the remaining white ashes, it will appear what quantity of carbon there was, which after having combined with the oxygen of the atmospherical air, went off as carbonic acid gas.

On the Analysis of the remaining Earth.

The remaining earth is accurately weighed, and infused with fix

* For ascertaining the quantity of any gas according to cubical inches, it requires only to be noticed on the glass, how far it is filled with gas, after which the glass is filled with an equal quantity of distilled water, the weight of which is accurately marked. As the Rhenish duodecimal cubic inch of distilled water amounts, according to accurate observation, to about 290 grains of medicinal weight, at a temperature of 12° Reaumur, the quantity of water is only to be divided with 290, and the quotient will show the quantity of the contained gas, according to Rhenish cubical inches.

ſix times its weight of diſtilled water, and digeſted in a glaſs veſſel, after which the fluid is to be examined by reagency, whether it contains free kali, or any other neutral ſalt. If this be the caſe, the earth ſhould be repeatedly edulcorated, till all ſaline admixture is removed. The remaining earth muſt undergo the following examination:

1. Infuſe it with diſtilled vinegar, this predominates, and all ſoluble parts are thereby diſſolved. What remains undiſſolved is ſiliceous earth, or ſiliceous and aluminous earth mixed with each other.

2. Infuſe therefore this remaining earth with pure diluted ſulphuric acid, and ſuffer it to digeſt. What remains hereby undiſſolved is pure ſiliceous earth, which muſt be waſhed out, dried, and weighed.

3. The ſolution with ſulphuric acid is ſaturated with mild ammonia. If no turbidneſs be occaſioned, no aluminous earth has been preſent; but if it exiſted it will fall to the bottom, and ought then to be edulcorated, dried, and weighed.

4. The ſolution obtained by the acetous acid muſt now be examined with reagency, in order to know what earths are contained in it; a few drops of a ſolution of Glauber's ſalt will, by the enſuing turbidneſs, ſoon diſcover whether any barytes exiſted in it.

5. If barytes was manifeſted in it by this manner, drop ſulphuric acid to the ſolution as long as any precipitation enſues. The precipitate muſt then be waſhed out and dried, and conſiſts of a mixture of ſulphate of barytes (heavy ſpar,) and ſulphat of lime, (ſelenite, gypſum.)

6. Should the earth alſo contain magneſia, this will be found mixed with the gypſum in form of magneſian vitriol, in the water that has been uſed at (5.) This muſt be gently evaporated as long as any ſelenite particles ſeparate from it, which are put to the former (5), and the remaining fluid is precipitated with cauſtic natrum (mineral alkali), and the precipitate edulcorated and dried, which exhibits the pure magneſia.

7. For ſeparating the heavy ſpar and gypſum obtained at (5), it is neceſſary, after having it dried and accurately weighed, to digeſt it well with 600 parts of diſtilled water, by which means the gypſum is diſſolved, whereas the heavy ſpar remains untouched, the weight of which, ſubtracted from the weight of the whole maſs, will determine the weight of the gypſum; and from the known quantitive proportion of the component parts of the heavy ſpar and gypſum, the quantity of barytes and calcareous earth that was contained in the ſame plant, may be determined.

Conclusion,

Conclusion. When we intend to examine and analyse any vegetable body here described, it is always necessary, that the results may prove accurate, to employ a new portion of the plant for the examination of each single component part, and to cast up the sum of every single matter that has been found and separated; and in this way it will be only possible to obtain an accurate knowledge of the true elementary mixture of such a plant. The operator should at the same time observe the utmost accuracy in his experiments, persevere in pursuing them, be indefatigable in repeating several times the same experiment, and attend to the utmost cleanliness of the vessels and the reagency, as, otherwise, accurate and certain results cannot be expected.

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*On the Medical Use of Alkalis in several Diseases.** *By* Dr. Stutz.

[Extracted from Hufeland's Journal, Vol. X. No. 4.]

Amongst the multitude of remedies which are exposed to the vicissitude of custom and fashion, none seem to have been so little regarded as the alkaline salts or alkalis. It is indeed surprising how much the use of alkalis, and particularly of the fixed one, has been hitherto confined by medical men. Salia media, acids, were frequently employed in different diseases from the earliest times of Medicine, whereas the alkalis were almost utterly neglected. Although the volatile alkali has been sometimes given in different disorders with much avail, yet the pure fixed alkali, mineral and vegetable, was but rarely or not at all used. Thus it has been only empirically recommended in the acor primarum viarum, in the rickets, where Abildgaard thinks it of avail in combination with bark and Rubia tinctorum; in dysenteries, in dropsy, by Stork, Abertauffer, and Theden, the last of whom gave it with wine; in all which diseases however it was only employed by a few physicians, and at the same time mostly in combination with different other remedies, that it is impossible to say which of them proved efficacious.

It was reserved to our enlightened age, to point out the medical excellency of alkalis, and to draw the attention of medical

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* We have already mentioned in our Journal, Vol. iii. p. 572, Dr. Stutz's Method of curing the Tetanus by means of Alkalis, &c.

medical men to a remedy, whoſe efficacy in the moſt dangerous affections appears to be inconteſtible. The excitant powers of the fixed alkali were not at all, or very little known, till the ingenious naturaliſt Mr. HUMBOLDT firſt hinted how efficacious a remedy it might prove; and till it was really employed in convulſions with great ſucceſs by Dr. MICHAELIS and WIEDEMAN, but afterwards it ſeemed again to be laid aſide. In October 1799, reading the experiments of Mr. HUMBOLDT on the influence which chemical ſubſtances have on excitability, and being led by farther reflexion and compariſon, I firſt conceived the idea of employing the fixed alkali in one of the moſt terrible diſeaſes, the Tetanus, which I had a frequent opportunity of obſerving in the Imperial Chief Hoſpital. The great ſucceſs with which this new method of cure was crowned, prevailed on the Council of War at Vienna, that copies of my caſes, and the method of cure which I have deſcribed, ſhould be diſtributed amongſt the phyſicians of the field hoſpitals of the Imperial army, in order to put that method to a fair trial. As the alkalis, in combination with opium, proved ſo highly ſerviceable in one of the moſt dangerous and mortal diſeaſes, I concluded farther, that their uſe might extend to other diſeaſes which originate in the ſame proximate cauſe. On this ſubject my ideas are the following. — *Alkalis, mild as well as caustic, are useful in all asthenic and spasmodic diseases of the nervous and muscular fibre of whatever species and form.* All ſpaſmodic diſeaſes differ only with reſpect to the individuals they attack, but agree in their internal character, which is common to all of them, that is to ſay, *in the character of the debilitated organic fibre.* That theſe diſeaſes originate in a debility of the organic fibre, ſeems to be a matter of no doubt; for, elſe, how could a fibre, endowed with proper force and elaſticity, be reduced by internal cauſes to ſuch irregular motions as in convulſions, or to ſuch inactive contractions as in the tonic ſpaſms; it is certain that the debilitated organic fibre can only be affected in ſuch a way. Excitant and corroborant remedies are therefore particularly indicated here, to remove that debility of the nervous and muſcular fibre; for which purpoſe, I recommend the fixed vegetable alkali and opium, alternately given, and the cauſtic alkali at the ſame time externally applied. The excitant and corroborant properties of alkalis, though in ſome meaſure acknowledged in the volatile and cauſtic alkali, was firſt diſcovered by the experiments of Mr. HUMBOLDT, on which my method of cure in Tetanus was built, and the ſucceſs of which has proved the juſtneſs of aſſerting that the alkalis belong to the excitant claſs of remedies.

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The particular diſeaſes, however, in which alkalis may be uſed with hopes of the greateſt ſucceſs, are,

1. *The Tetanus and Trismus Traumaticus*, which I ſucceeded in curing, in a ſhort time, by externally applying the cauſtic alkali in a hot bath, and by giving the mild one internally, particularly by alternately adminiſtering opium at the ſame time; upon which method of cure I ſhall treat more fully in a peculiar eſſay.

2. Another diſeaſe, in which the alternate application of alkalis and opium has been of the greateſt avail, are *the convulſions of pregnant women*, a diſeaſe equally dangerous. Although convulſions in children have been ſucceſsfully removed by vegetable alkalis, according to the obſervations of Doctors MICHAELIS and WIEDEMANN, yet there was no certain method eſtabliſhed, and the alternate uſe of alkalis with opium, and their application in baths and fomentations was ſtill unknown. Inſtead of reaſoning about this matter, I beg leave to relate the hiſtory of a caſe communicated to me by the ingenious ſurgeon Profeſſor BRUNINGHAUSEN, at Wurzburg.

" A healthy young lady, aged about twenty years, of a very mild temper but of an irritable conſtitution, being pregnant for the firſt time, complained after the ſeventh month of her pregnancy, (till which period ſhe had always been very well) of a violent griping in the belly, without any evident cauſe. A few hours after ſhe felt a ſpaſmodic contraction of the left leg, which attempting to ſtretch out, ſhe was ſeized by the moſt violent convulſions of the whole body, that laſted about ten minutes, and returned half an hour after. The phyſician who attended her, ordered her to be bled immediately, as the young woman was of a plethoric habit, her face extremely red and ſwollen, and the pulſe ſtrong and full; after which, clyſters with laudanum and aſafœtida, fomentations of emollient herbs on the belly, and frictions on the joints with volatile liniment and laudanum were applied, and internally valerian with opium preſcribed; which remedy, however, ſhe was not able to ſwallow, on account of the locked ſtate of the jaws, the ſenſeleſsneſs, and the utmoſt difficulty of ſwallowing. The intervals of the return of the convulſions increaſed by degrees, but the fits became more violent. On the 18th of June I was called, partly in order to bring on her labour, if I thought proper; partly to make the Cæſarean operation, in caſe the patient ſhould periſh in a fit of theſe convulſions, for the purpoſe of ſaving at leaſt the life of the child. Before my arrival the patient had already ſuffered twenty-three of the moſt violent fits, each of which threatened to kill her. The face became always red and ſwollen ſhortly before a fit came on, which, therefore,

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was foreſeen by theſe ſymptoms; the eyes were, at the ſame time, ſtaring, and the pupils immoveable; and at a deeper inſpiration, a murmuring noiſe was heard, and a bloody foam appeared at the mouth. All the muſcles of the extremities were in a continual viciſſitude of rapid contraction and extenſion, and the face of the lady became horridly diſtorted and blue. Each paroxyſm always terminated in about eight or ten minutes with the moſt violent contractions of the extenſors, while the ſnoring, ſenſeleſs, and comatoſe ſtate continued. The pulſe was frequent and hard. On touching the belly for a conſiderable time, I remarked no motion of the child; and examining the os uteri, I found it ſtill ſo high that I could hardly reach it; it was ſoft, but ſhut in ſuch a manner that the point of my foreſinger could not enter. Whilſt I was thus examining, the patient relapſed again into a vehement convulſive paroxyſm; nevertheleſs, I continued the examination for ſome moments, purpoſely to diſcover whether the convulſions had any influence upon the orifice, which, however, was not the caſe, as it remained relaxed and immoveable; but the uterus was moſt violently contracted, of which I convinced myſelf by touching the belly during the paroxyſm; it then became ſoft, and no ſymptom of a labour appeared. Under ſuch embarraſſing circumſtances, there was not any indication for an artificial delivery; on the contrary, there was reaſon to fear that on attempting to deliver her, the convulſions might be ſo much increaſed, as to deſtroy the patient immediately. When we met again in the afternoon, the ſtate of the patient was rather worſe; the convulſions had become more violent, and the paroxyſms brought on after rubbing in oil with opium. The ſtate which ſhe was in being ſo very deſperate, her relations deſired me to deſiſt from any further attempt to relieve her, as they thought ſhe muſt certainly die; and I ſincerely confeſs we were of the ſame opinion. In this alarming ſituation, I was put in mind of the method of cure which Dr. STUTZ had ſo ſucceſsfully employed in three caſes of Tetanus; and thinking, that however different the external appearance of thoſe diſeaſes might be, yet they agree in their nature and proximate cauſe, I propoſed the matter to my colleague, the attending phyſician, who readily adopted my idea. As there was no time to be loſt, we inſtantly preſcribed, R. Sal. tart. alc. dr. j. ſolv. in aq. diſtillat. unc. iv. two table ſpoons full to be taken every two hours, and in the intervals ten drops of laudanum. Doubting, however, of the patient being able to ſwallow the medicine, we endeavoured to apply it as near to the uterus and lumbar nerves as we poſſibly could. Half an ounce of Sal. tart. alcal. was accordingly preſcribed, of which two ſcruples with a de-

coction of camomile flowers were ordered to be applied in a clyſter. We had wiſhed to put the patient into a hot bath; but ſhe being ſo far reduced, we were apprehenſive of her dying in it; I therefore recommended an application of the cauſtic alkali on the belly in fomentations, and one ounce of lapis cauſtic chirurgorum was accordingly diſſolved in one pint and a half of water, into which a cloth was dipped, and after it had been wrung out, put on the belly. I never ſaw a more ſtriking effect of any medicine than in this caſe. Two table ſpoons full of the medicine were given to her, which ſhe kept for a while in the mouth, but ſwallowed it at laſt. After the firſt clyſter and fomentation had been applied, a very extraordinary change was remarked. The eyes, which were before ſtaring, moved continually; the whole body, which lay before in an apoplectic ſtate, became reſtleſs; ſhe began to lift the arms, that had been quite lame, and to ſcratch the belly with her hand, becauſe an itching was probably occaſioned by the fomentations, as we imagined from a ſlight redneſs that was perceived on the belly. The paroxyſms, which before came on every quarter of an hour, remitted now for two hours; and after the repeated application of thoſe remedies, entirely ceaſed; the patient became quiet, recovered her ſenſes, and anſwered to ſeveral queſtions. At laſt ſhe began to complain of pains in the belly, which became afterwards true pains of labour, and were not at all interrupted by convulſions. About ſix o'clock in the evening ſhe was delivered of a child, which, though very weak and apparently dead, was with much trouble, reſtored to life within an hour. The placenta came out without difficulty; a ſound ſleep enſued; and we congratulated ourſelves upon this unexpected happy ſucceſs; when ſhe was, an hour after the delivery, ſuddenly attacked by a new paroxyſm, more violent than any ſhe had before experienced; and after the ſhort interval of ſix minutes, another, equally violent, ſucceeded. All ſeemed now to be loſt; we had, however, recourſe to the ſame remedies, and fortunately they did not forſake us. After a clyſter with one drachm of Sal. alcal. vegetab. had been applied, the fomentations renewed, and ſome table ſpoons full of the above ſolution adminiſtered, which remedies were ſome hours continued alternately with opium, ſhe fell aſleep again, and a copious perſpiration came on, after which the convulſive fits completely ceaſed. The lady was very weak, but recovered her ſtrength in a ſhort time. I abſtain from every remark upon this caſe, by which the great uſe of the above treatment ſeems to be evidently proved, and only add, that it ought to be remembered that, according to experience, convulſions in the laſt months

months of pregnancy are moſt dangerous affections, and almoſt always prove fatal."

3. *In convulsions of every kind of adults as well as of children*, the alkalis are, according to my own experience and the obſervations of MICHAELIS, WIEDEMANN, &c. of very great ſervice, particularly when alternately adminiſtered with opium. In ſlight caſes of convulſions of children, a diſeaſe to which ſo many fall a ſacrifice, the Sal. tartari, or the Oleum tartari per deliquium, is very ſerviceable; but in a higher degree of organic debility, I employed volatile alkali, viz. the ſprit. c. c. ſuccinat. in a few drops in a proper vehicle, generally in Syrup. de cichor. cum Rheo. In clyſters, the ſpirit of hartſhorn is likewiſe of avail in theſe caſes, in a greater or leſs doſe, according to circumſtances. I have alſo had frequent opportunity of obſerving the good effects of the ſpirit of hartſhorn in the hooping cough, a diſeaſe that is certainly of a ſpaſmodic nature, upon which, however, I ſhall treat more fully at another time, and only relate a caſe, by which the uncommon efficacy of alkalis with opium, in convulſions of adults, is moſt evidently ſhown.

[To be continued.]

CRITICAL RETROSPECT

OF

MEDICAL AND PHYSICAL LITERATURE.

[FOREIGN AND DOMESTIC.]

Anleitung zur Kentniss und Wahl des Arztes; i. e. Inſtruction for the Knowledge and Choice of a Phyſician. By JOSEPH FRANK, Phyſician to the General Hoſpital at Vienna. 123 pp. 8vo. 1800. Vienna, Schaumburg.

THIS publication is intended to inform the public of the qualities of a good phyſician, in order to enable it to judge properly, whether the phyſician, to whom health and life are to be entruſted, really poſſeſſes all the knowledge and abilities which are neceſſary for the preſervation of health and the cure of diſeaſes. It is very obvious from daily experience, that with reſpect to the choice of a phyſician, the public is frequently miſled by faſhion, deceived by an ambiguous celebrity, by recommendations, and by protections; and we are afraid that this will by no means be remedied by the preſent publication. For though we do not deny to it the me-

rit of acquainting the public with the true qualities of a phyſician, by which it may be enabled to judge in ſome ſingle inſtances, yet on the whole, it would require a greater knowledge of the medical ſcience than can be expected, but without which, however, it will be impoſſible to diſcover any miſtakes or errors that a phyſician may commit in the treatment of a diſeaſe. After having premiſed ſome juſt remarks on the too great number of thoſe who devote themſelves to medicine, and on the different means and expedients by which young doctors attempt to introduce themſelves into practice, the author treats, in the *firſt ſection*, of the perſon of a phyſician. *Ch.* 1. Of the exterieur of the phyſician, to which he refers his phyſiognomy, dreſs, and manners. *Ch.* 2. Of the phyſical qualities of a phyſician. Medical art being founded upon experience, and accurate obſervation of things that are obvious to our ſenſes, a phyſician ought to poſſeſs them in a moſt perfect ſtate; this the author ſhows of every ſenſe in particular. *Ch.* 3. Of the moral qualities, judgment, &c. of a phyſician. Humanity, patience, modeſty, ſecrecy, and moderation, are the principal virtues at which a phyſician ſhould particularly aim; beſides a comprehenſive genius, he ought to have a good memory, and a knowledge of the dead and living languages. The *ſecond ſection* treats in *three chapters*, of the conduct of the phyſician towards his colleagues, towards ſurgeons and apothecaries, and towards the patient; upon the laſt of which he particularly dwells; and we meet every where with remarks that are confirmed by experience. At the end of the preface the author promiſes to preſent to his readers a ſketch of the Brunonian ſyſtem, a circumſtance which ſhould not ſurpriſe us, as the author is known to be one of the principal partizans of the Brunonian theory, and conſequently intereſted in its acquiring the moſt extenſive popularity.

Recherches Phyſiologiques ſur la Vie et la Mort; i. e. Phyſiological Reſearches on Life and Death; by Xav. Bichat, Profeſſor of Anatomy and Phyſiology. Paris, Year viii. in two vol. 8vo. price 5 francs, or about 5s.

We here announce a new work on two intereſting ſubjects of the organic doctrine, *life* and *death*, which, on account of its general excellency, deſerves a more copious notice. The author attempts to enquire into the Zoonomick laws by analyſis and ſtrict induction, and has, indeed, given light on ſeveral obſcure doctrines of phyſiology, by his viviſections, and other ingenious experiments; though, on the other ſide, he has frequently ſuffered himſelf to be deluded by a luxuriant imagination, and to be miſled by an acuteneſs more ſubtle than true, with which he endeavours to force Nature into ſyſtematical bonds, which are frequently diſregarded in a ſubject that will never allow itſelf to be conſtrained by ſyſtems.

The work is divided into two parts, the firſt of which treats of Life, and the ſecond of Death. The firſt part comprehends ten articles,

articles, viz. Art. 1. *General division of life.* The author calls life the whole (l'enſemble) of the functions that reſiſt death. The principle of life, which we only know from its phenomena, oppoſes itſelf to the deſtructive action of external influences; and there exiſts, conſequently, a continual viciſſitude of action and reaction in the living body. *Life* ſhows two principal modifications, an *organic* or *internal* life, and an *animal* or *external* one, *(vie animale, ou de relation)* the firſt of which is common both to animals and vegetables, comprehending their exiſtence, nutrition, growth, aſſimilation, digeſtion, ſecretions, and excretions; the ſecond belongs to men and animals, by which they are enabled to perceive, to move voluntarily, and to expreſs their deſires and paſſions; in one word, to connect their exiſtence with other beings. Each of theſe two kinds of life has again two orders of functions. The firſt order of the animal life proceeds from without, towards the brain; the ſecond, from the brain towards the organs of locomotion and of voice. By the firſt order of functions in the organic life, the nutritive ſubſtances are aſſimilated, to which belong digeſtion, circulation, reſpiration, and nutrition: By the functions of the ſecond order, the particles that have become heterogeneous to organization are removed; abſorption, circulation, perſpiration, and ſecretion. The ſyſtem of circulation, as the centre of the organic life, belongs to both orders.

Art. 2. *Chief differences of the two lives, with regard to the forms of their reſpective organs.* The greateſt ſymmetry prevails in the organs of animal life; whereas thoſe of the organic life are extremely irregular. By a line drawn along the middle of the human body, the organs of the firſt life, brain and nerves, will be ſeparated in two equal parts, which are not ſtrictly dependent on each other, as we ſee, for inſtance, in hemiplegia; but in the organic life, every part is combined and ſubſervient to each other; their form and ſituation are, at the ſame time, more frequently changed than in the other. The idea of this law, the author firſt diſplayed, with a great deal of acuteneſs and ingenuity, in the Memoirs of the Medical Society at Paris; however, it is liable to many objections that may be juſtly raiſed againſt it.

Art. 3. *Chief difference of the two lives, with regard to the mode of action of their reſpective organs.* The actions of the organs of animal life proceed with the greateſt proportion and harmony, which ſeems in a great meaſure to be owing to their ſymmetrical ſituation and form. The author, in ſtrictly examining this law, meets with ſeveral exceptions, which, however, he endeavours to explain with much acuteneſs. The apparent inequality between the actions of the muſcular ſyſtem of the right ſide, which is thought to enjoy more ſtrength than that of the left, is not founded in nature, but merely produced by the cuſtoms of ſociety. In the mode of actions of the organic life, however, the greateſt difference prevails, as one organ is frequently larger than another, and performs its functions better than another; one kidney is often larger than the other, and ſecretes more urine, &c.

Art.

Art. 4. *Chief difference of the two lives, with regard to the duration of their actions.* The functions of the organic life proceed in a continual progreſſion, whereas in the animal life, an intermiſſion takes place: The author attempts to elude ſeveral objections that may be propoſed againſt this law, which does not at all appear to be founded upon obſervation. It cannot be well aſſerted, that all influence of the nerves, upon voluntary muſcles, ceaſes when they are in a quiet ſtate, or on the organs of ſenſes during ſleep.

Art. 5. *Chief difference of both lives, with regard to cuſtom and habit.* Cuſtom diminiſhes the perception and ſenſe of pain and pleaſure, but it brings the judgment to a greater perfection: The power of habit does not extend to the organic life, and the circulation, reſpiration, and perſpiration, are not influenced by it. The author, however, does not omit to remember the great power of habit in eating and drinking, return of appetite, excretio alvi et urinae, on which account he refers them to the phenomena that keep the medium in both lives.

Art. 6. *Chief difference of both lives, with regard to moral properties.* All operations of the underſtanding are ſituated within the compaſs of animal life, but the paſſions are ruled by the organic life, whoſe ſound and morbid ſtate, different degree of ſtrength, and the predominant functions of any organ, have a remarkable influence on paſſions and temper. The influence of violent paſſions on the muſcular ſyſtem, ought to be explained, according to our author, from the more or leſs vehement influx of blood into the brain, and the locomotive organs, &c. But as the debilitating and depreſſing affections of the mind do always leave viſible impreſſions in the voluntary muſcles, particularly of the face, and as, beſides, leſions of the inner organs produce convulſions and palſies of the extremities, the author is obliged to adopt a ſympathetic connexion between the organs of the internal life and the brain, in order to explain thoſe phenomena. He denies that the paſſions ariſe from the *centrum epigaſtricum* of nerves, an opinion which ſome modern phyſiologiſts have adopted: He adds, however, ſome very ingenious remarks on the great ſympathetic nerve, in which he diſplays at the ſame time a profound knowledge of of the finer anatomy.

Art. 7. *Chief difference of the two lives, with regard to the vital powers.* The vital powers are not ſubject to phyſical laws; extenſibility, a property of the tela celluloſa, which even remains after death, differs greatly from ſenſibility and contractility. The firſt, however, is of a different character in the two lives, becauſe in the organic life it conſiſts in the faculty of receiving impreſſions, but in the animal life of conducting them to a common central point; and though this animal and organic ſenſibility agree in their chief character, yet they ſeem to be diſtinguiſhed by the degree and proportion with which they act. Contractility may be ſeparated into animal and organic; the firſt of which is influenced by the will, and begins in the ſenſorium commune; the ſecond exiſts in the different organs, and admits two modifications, the perceptible and imperceptible contractility.

Art.

Art. 8. *Origin and progress of the animal life.* The activity of the organic life begins in the firſt moment of exiſtence, but in the embryo animal life cannot be traced. The actions of the animal organs come to perfection by degrees, whereas the organic ones perform their functions from the firſt moment to the end with equal perfection and accuracy. The new-born animal ſtaggers in walking and ſtanding, while its ſtomach digeſts well, and the glandular ſyſtem acts in juſt proportion.

Art. 9. *Origin and progress of the organic life.* The functions for aſſimilation are very ſimple in the fetus, and proceed very quickly, as the nutritive particles enter into the fetus after being prepared in the mother. The ſecretions and excretions are ſlow and inconſiderable; but as the inner organs receive immediately the juſt degree of action, none of them ſhould properly excel the other, or become ſtronger or weaker. This, however, is not found to be ſo; the liver, for inſtance, frequently rules other organs, whence the varieties in the temper.

Art. 10. *Natural death of both lives.* The ſame difference which they ſhow in their beginning and progreſs, are alſo remarked in their ending. Animal life ceaſes in natural death a long time before the organic. The taſte remains the longeſt. Mankind approaches, in the boſom of the mother, and at the verge of life, to a plant. Natural death has two periods, in the firſt of which reſpiration and circulation ceaſe together with the animal life; in the ſecond, the reſt of the organic functions, but by degrees and ſlowly. The digeſtive power of the ſtomach and abſorption continue for ſome time; the hair and nails grow, &c. The death of old age proceeds in a different manner; one function is extinguiſhed after another; circulation is ſtopped firſt in the ſmaller, then in the larger veſſels; in ſhort, the death of old people proceeds from the periphery towards the centre, and the heart is the *ultimum moriens.*

[To be continued.]

Obſervations on Mr. Home's Treatment of Strictures in the Urethra; with an improved Method of treating certain Caſes of thoſe Diſeaſes, by THOMAS WHATELY, Member of the Royal College of Surgeons in London. Illuſtrated by an Engraving, 8vo. pp. 112, price 2s. 6d. London, 1801, Johnſon, &c.

WE are much pleaſed to find that the hope we expreſſed in our account of Mr. W's correct and elaborate work on Gonorrhœa Virulenta, (vol. v. p. 383) has been already ſo far gratified. An improper treatment of gonorrhœa is, doubtleſs, the moſt frequent cauſe of ſtrictures, and therefore we may conſider the treatment of ſtrictures in the urethra as forming alſo an important part of the cure of the venereal diſeaſe, or its conſequences. The male urethra has, with ſufficient reaſon, been called Pandora's box; and of all the evils it has produced, ſtrictures, either immediately or in their conſequences, may be conſidered as the moſt formidable and diſtreſſing. However "invidious," therefore, "it may appear to

others,

others, or however painful to ourſelves," the author obſerves, "it may be, to attack the opinions of a reſpectable character; yet to be more influenced by a reluctance to condemn the practice of an individual than by a deſire to relieve the thouſands of wretched beings around us, would be a reprehenſible delicacy." Our narrow limits do ſeldom permit us to do juſtice to practical works of this kind; and indeed our readers muſt long have obſerved, that our object is merely to point out and diſtinguiſh ſuch new works as merit the attention of certain practitioners, or the public in general. Now it is our opinion, that no ſurgeon who wiſhes to do his duty to his patients in the beſt manner in his power, will neglect to read Mr. W's pamphlets on Gonorrhœa and Strictures: That our readers, however, may have an opportunity of judging for themſelves, rather than relying on our authority only, we ſhall, according to our cuſtom, preſent them with a few extracts. After making ſome remarks on the prediſpoſing cauſe of ſtrictures in the urethra, Mr. W. proceeds "to inquire into the preſent method of treating certain caſes of them by the cauſtic. My obſervations on this head are meant, ſays he, to excite the attention of the reader to an improved method of treating the complaint in queſtion. Fearing, however, leſt ſo many publications on the cure of ſtrictures of the urethra by the cauſtic ſhould miſlead the young practitioner, and cauſe him to overlook what has been done, and what ſtill may be done by a judicious management of the common bougie, I have judged it right, before I enter on the ſubject of cauſtic applications, to make a few extracts reſpecting the uſe of this ſimple inſtrument, from thoſe excellent ſurgeons, Mr. S. Sharpe and Mr. Hunter.

"Strictures in the urethra appear not to have been treated judiciouſly, previous to the time of Monſieur Daran. Although the bougie had been uſed long before his time, it is to him we are indebted for a more extenſive and methodical application of it. Mr. Samuel Sharpe, and Mr. Hunter, have ſince extended and brought to great perfection the uſe of this inſtrument, by which a very diſtreſſing complaint has been, in many inſtances, perfectly cured; and in the greater number of other caſes, it has been ſo much alleviated by its occaſional uſe, as to enable the patient to paſs through life without ſuffering any ſerious inconveniences from his infirmity. Both Mr. Sharpe and Mr. Hunter (particularly the latter) have given very excellent directions how to uſe this remedy, and have informed us upon what principle it acts."

Mr. W. concludes his quotations from theſe authors, with the following from Mr. Hunter:

"And in the following ſection he remarks, that "When a bou-"gie can readily paſs, there is no neceſſity for uſing any other "method to remove the ſtricture." He then proceeds with great judgment to the treatment by cauſtic of ſuch ſtrictures, "as are "either ſo tight as not to allow the ſmalleſt bougie to paſs;" or of ſuch, "as have not the orifice in the ſtricture in a line with the "urethra, which will make it uncertain, if not impoſſible, to "paſs a bougie." He likewiſe recommends the cauſtic in thoſe

caſes

caſes, in which " there may be no paſſage at all, it having been " obliterated by diſeaſe, and the urine paſſed by fiſtulæ in perinæo."

" Mr. Hunter applied the cauſtic in caſes of this deſcription at firſt by means of a ſilver canula; but, on account of many diſadvantages attending this mode of uſing it, we are told by Mr. Home, that, for ſome years before Mr. Hunter's death, he uſed it upon an improved plan, viz. by inſerting a ſmall piece of lunar cauſtic into the end of a bougie, in ſuch a manner, that the cauſtic was ſurrounded every where laterally by the ſubſtance of the bougie; ſo that in its paſſage to the ſtricture, the cauſtic was ſcarcely allowed to come into contact with any part of the membrane of the urethra; the point of the bougie always moving in the middle line of the canal.

" Mr. Home informs us, that, ever ſince Mr. Hunter's death, he has continued to make uſe of the ſame method of applying the cauſtic; but it is evident from many parts of his work, that he employs commonly, for this purpoſe, bougies of a much larger ſize than thoſe which were uſed by Mr. Hunter; and he ſeems to be deſirous, in every caſe in which he adopts this method of treatment, to paſs through the ſtricture a bougie, thus armed with cauſtic, as large as the natural ſize of the canal of the urethra.

" Mr. Home has not only employed the cauſtic in thoſe caſes, in which it had been recommended by Mr. Hunter, but he has likewiſe uſed it in old ſtrictures, and ſuch as could not be dilated to more than half the ſize of the reſt of the canal by the common bougie, and which, when dilated, were apt to contract, and require a freſh application of the bougie within two months after it had been left off. Mr. Home therefore informs us, that his obſervations " will be confined entirely to the treatment of thoſe ſtric- " tures which admit a ſmall bougie to paſs into the bladder; and " that they are publiſhed with a view to extend the uſe of the " cauſtic to a greater variety of caſes, and in ſome meaſure upon " a different principle from that on which it was applied to imper- " vious ſtrictures by the late Mr. Hunter."

" The ſubject is of great importance to thouſands afflicted with this malady. And as the propoſed alteration in the plan of cure is by a remedy of a very violent nature, capable, if not uſed with great judgment, of producing conſequences worſe than even the diſeaſe for which it is applied, it demands the moſt ſerious inveſtigation. This I ſhall now enter upon, by firſt making a few obſervations, concerning the manner in which ſtrictures uſually affect the urethra, the number they commonly conſiſt of in the ſame perſon, and the part of the canal in which they are uſually ſituate."

Our Author has not contented himſelf with common experience or obſervation, but has made a number of experiments with cauſtic on viſible parts of the body, ſuch as the inſide of the cheek, which reſemble the urethra in ſtructure. He then ſays,

" Having endeavoured to ſhew what are the probable effects of lunar cauſtic, when applied to the inner membrane of the urethra in caſes of ſtricture, by comparing its known effects when applied

to parts that are open to obſervation, I ſhall proceed to point out the defects which appear in Mr. Home's method of uſing it, and the conſequences which ſometimes reſult from its being thus applied. After this I ſhall, with all deference, propoſe another mode of applying the cauſtic, which will, I apprehend, preclude every diſagreeable effect that has hitherto attended the uſe of this powerful remedy.

"I begin with obſerving, that the orifice of the urethra is ſo ſmall in ſome caſes of ſtricture, as not to admit the ſmalleſt bougie I have ever ſeen armed with cauſtic. Of courſe, the cauſtic cannot be applied to the ſtricture, while it is in this ſtate. This contraction may ariſe, either from a natural conformation of the part, or from its having been the ſeat of chancres; or it may have come on gradually, from the long continuance of a ſtricture in any part of the urethra. If the contraction ariſe from the firſt cauſe, it may often be remedied by dividing the web at the orifice of the urethra; but this muſt render the part for ſome time very tender, and in an unfit ſtate to be ſtretched by a large bougie. A contraction from the ſecond cauſe may frequently be dilated; though it muſt be confeſſed, that, in ſome of theſe caſes, it is impoſſible to dilate it, ſo far as to admit even the ſmalleſt ſized armed bougie for the purpoſe of applying the cauſtic. Of this I have lately had an inſtance. In the third caſe, dilatation is generally practicable, and it will remove the difficulty."

The objections to Mr. Home's manner of applying the cauſtic, turn on ſome of the following circumſtances, viz.

The mucus of the urethra renders its action uncertain.

The bougies are too large, and therefore only reach the anterior part of the ſtricture, or do injury if forced through it.

The cauſtic is applied too often, and to too many ſtrictures at a time.

The conſequences have often been ſerious and alarming.

Mr. W. next proceeds to deliver his own *Method of treating Strictures in the Urethra by the Caustic;* but for this we muſt refer our Readers to a future Number.

A Compendious Medical Dictionary, containing an Explanation of the Terms in Anatomy, Physiology, Surgery, Practice of Physic, Materia Medica, Chemistry, &c. By R. Hooper, M.D. 2d edit. 8vo. pr. 7s. in boards. London, 1801, Murray and Highley.

We can with great propriety recommend this Medical Dictionary, as containing a correct explanation of the terms, with their derivations, and marks to direct their proper pronunciation.

Reports on the Diseases in London, particularly during the Years, 1796, 97, 98, 99, *and* 1800. By R. Willan, M. D. F. A. S. large 12mo. pp. 360. London, 1801, Phillips, &c.

To practitioners near the metropolis this work muſt be highly intereſting; and as the diſeaſes of the poor in all large cities are very ſimilar, the Hoſpital and Diſpenſary practititioner in every part of

of the world will find much useful and important information in it. The Nosology of several of the cutaneous diseases will require a reference to Dr. Willan's elaborate work on that subject, of which we are sorry to observe, a part only is at present published. Dr. W. gives the following account of the history of the present volume.

"A part of the following Reports was inserted in the Monthly Magazine for the years 1796, 1797, and in the Medical and Physical Journal for 1799. Many of the readers of those periodical works having honoured with particular notice the statements respecting Chronic Diseases, as well as Epidemics, it was proposed to me that the monthly accounts of them should be revised, and republished separately, with any additional observations which might occur.

"With this proposition I have complied, finding myself unable through a variety of engagements, to accomplish another object which has been urged as a desirable one;—to give, under some proper arrangement, an accurate history of the disorders prevalent in or near London, from actual observation, without any bias from the consideration of diseases of other climates, and without a constant reference to the congeries of symptoms detailed by systematic writers.

"In the present work, not only the accounts of diseases for 1796, 1797, and 1799, are amplified, but Reports, entirely new, with various collateral observations, are added for the year 1798; also for 1800, a year remarkable for its temperature, and for an unusual series of complaints. Any irregularities which appear in the lists of diseases will, I hope, be excused, a nice arrangement of them not having been the primary object. The generic distinctions and varieties must be principally referred to the Nosology of Sauvages. In forming the three classes of Acute, Chronic, and Periodical Diseases, the usual plan of nosologists has not been observed. All the writers on this subject, influenced, perhaps, by the opinion of Sydenham, have not only included Intermittents under the denomination of Fever, but considered one of their paroxysms as an epitome of Fevers in general, the different forms of which are said to consist merely of a repetition of such paroxysms more or less distinctly marked with longer or shorter intervals. Those, however, who take the trouble to compare minutely the symptoms of an Ague, and of a malignant Fever from contagion, will find that the primary appearances, the course, and crisis of the two diseases are as different as their exciting causes; and that no more analogy subsists between them than between the Small-pox, Erysipelas, Rheumatism, and internal Inflammation. I have, from close attention, been so much impressed with the difference, as to think that intermittents should be wholly disjoined from every disorder propagated by infection, and arranged in a separate class. With respect to the classes under which the diseases are put down in the following pages, it may be observed, that,

"1. ACUTE DISASES are attended with disturbance of the bodily

bodily functions, so violent and general, that unless they terminate favourably, or change their form, they must prove fatal within a short compass of time. The symptoms characterizing an acute disease at its commencement, and which have little remission during its course, are, sudden and considerable loss of strength, pain in the loins, aching of the limbs, total incapacity of attention or exertion of mind, heat of the skin, thirst, a frequent pulse, and furred tongue. These general symptoms, differently proportioned and variously modified, according to the strength, depression, or irregularity of the pulse, the state of the mind, and appearances of the tongue, form the sub-divisions and generic distinctions of febrile complaints.

" 2. CHRONIC DISEASES are of long duration, and mostly consist of uneasiness in some part or organ, and of impediment to the performance of its functions. They are usually attended with general debility, but not with violent disorder of the constitution.

" 3. PERIODICAL DISEASES are characterized by a return, at stated intervals, of pain and general disorder, or fits of shivering, followed by heat of the skin, and perspiration, the whole being comprised in less than twenty-four hours. During the intervals, however, the patient is not in a state of health, but has a sallow complexion, and is affected with languor, debility, loss of appetite, &c.

" Most of the plans of nosology are exceptionable, as being formed on hypothetical principles, rather than a strict analogy between the diseases put in the same order. It is not my present view to multiply objections, nor to enlarge on this subject; I shall only observe that the disease, to which the denomination of Synochus is hereafter applied, has some affinity with the Synochus of the antients. This term is not employed by Dr. Cullen in its original sense, but to express the combination of an inflammatory with a contagious Fever. The practitioners of North Britain hastily exclude from nosology, and seem to deny, the existence of a complaint with which their station does not lead them to be acquainted.

" Eryspelas is usually ranked among the Exanthemata, though having little affinity with the other diseases arranged under the same order. The form of it entitled Eryspelas phlegmonoides, does not seem communicable by contagion: However, when the fluid contained in its vesicles is inoculated into the arm, it excites a diffuse inflammation and swelling, with a slight degree of fever. The œdematic, or gangrenous forms of Eryspelas may be combined with malignant Fever, and thus communicated from one person to another. Instances of this have occurred frequently in Hospitals, the complicated disease spreading through the whole ward. It is singular, that the Fever likewise unites itself with other complaints, and is propagated by infection under a double form. I may mention, as an instance, the combination of an ulcerated Sore-throat with malignant Fever. To this combination alone, which often

occurs,

occurs, and is very contagious, the title of Angina Maligna would have been moſt properly applied. Medical writers, by not diſtinguiſhing it from the Scarlatina anginoſa, have been led into obſcurity, and made a foundation for ſome needleſs controverſies. I may here alſo refer to the obſervations made on the complication of puerperal and malignant Fever, which has ſome analogy with the caſes above ſtated.

" The term Hectica is uſed in the ſignification given to it by the Greek phyſicians; among whom it was not conſidered merely as a ſecondary complaint, depending on internal ſuppuration, or any local defect, but as ariſing from a failure of ſtrength in old age, from an exhauſted ſtate of conſtitution, occaſioned by fatigue, long faſting, anxiety, or loſs of ſleep; and ſometimes as a ſequel of Cauſos or other Fevers. They remark farther, that the Hectica often appears at firſt like an Ephemera, that it is always aggravated after food, that its duration is indefinite, and that it often terminates in a maraſmus. All the ſpecies of Hectic are characterized by the recurrence every twenty-four hours, or ſometimes every twelve hours, of heat of the ſkin, after ſlight chilline's, with a circumſcribed fluſh of the cheeks, an increaſed velocity of the pulſe, and violent perſpirations towards morning.—In infancy, childhood, youth, and old age, Hectic takes place, without any local affection, from changes in the conſtitution, connected with the different ſtages of human life. A ſimilar ſtate of diſorder is often produced in perſons of the middle age, when the conſtitutional vigour firſt appears to decline, not reſiſting as uſual the operation of cold, fatigue, and other occaſional cauſes. This ſtate is moſtly accompanied with aphthous ulcerations of the tongue and fauces, and a large ſecretion of frothy phlegm. Under this head alſo muſt be ranked the Febris aphthoſa, or Hectica aphthoſa, often put down in the ſucceeding liſts. It commences with violent and repeated ſhiverings, ſucceeded by fluſhes of heat; with pains of the head, neck, and limbs; roughneſs of the throat; a dark redneſs and enlargement of the papillæ of the tongue; likewiſe an enlargement of the veins of the uvula, tonſils, &c. The formation of aphthæ is immediately followed by a dryneſs of the tongue, clammineſs of the mouth, nauſea, hiccough, heat in the ſtomach, which is increaſed by medicines, wine, or food, taken warm. A Diarrhœa ſupervenes, in which the ſtools are of a dark brown colour, and often ſtreaked with blood. The urine is at firſt clear, but has afterwards a curdly pink ſediment, as in other hectic caſes. There is uſually pain and deafneſs in one ear, with great pain and tenderneſs in the ſoles of the feet. A circumſcribed redneſs appears on the cheeks towards evening, attended with a quick pulſe, heat of the ſkin, ſlight delirium, and reſtleſſneſs. During the day the patient is languid and heavy, and ſometimes thirſty, with but little appetite. After the tongue, fauces, &c. have been healed, the Aphthous ulcerations return again, with internal heat, general uneaſineſs, and the ſame train of ſymptoms as at firſt. By frequent relapſes of this kind, the patient is often reduced to an extreme

extreme degree of debility and emaciation; and the whole duration of the complaint is from five to twelve weeks. The cases of Hectic, put down in the last Report for the year 1800, were mostly of the kind here described. An account of this complaint was, by mistake, omitted in its proper place.

"In the lists of diseases prefixed to the Reports, two-thirds of the cases occurred among the lower classes of people, mostly patients of the Public Dispensary, near Temple-Bar: the remaining third was the result of private practice in the upper ranks of society. The increased number of cases put down for the last two years must be in a great measure referred to the flourishing state of the Dispensary, by means of which the medical attendants became more fully acquainted with the diseases of the district; a district extending from Smithfield and St. Paul's to St. Martin's Lane and Tottenham Court Road.

"A comparative view of the Bills of Mortality, at different periods, and a diary of the weather, are given at the end of the book, as necessary appendages to a work of this kind. The Meteorological Journal, taken from the Philosophical Transactions, was kept at the apartments of the Royal Society. It is to be noticed, that the quicksilver in the bason of the barometer is 81 feet above the level of low water spring-tides at Somerset-House."

The observations interspersed through the work are every where judicious and important, and the necessary tables and indices are not omitted.

An Introduction to a Course of Lectures on the Operations of Surgery; by T. Chevalier, A.M. &c. 8vo. pp. 58. London, 1801, Bagster, Callow, &c.

We advise every young man who wishes to become a respectable surgeon, to read this lecture more than once. It embraces a concise view of the following subjects, viz. The natural endowments, acquired preparatory knowledge, necessity of anatomical knowledge, physiology, appearances of disease, just reasoning, remedies, operations on the dead and living body. On this part of the duty of a good surgeon, Mr. C. points out a number of considerations respecting the circumstances of the patient; the instruments, unforeseen accidents during an operation, general rules for conducting an operation, the after treatment, and supervening fever. Mr. C. concludes with inculcating the necessity of industry and diligence, from the commencement of his studies to the end of a surgeon's professional labours. As a specimen of Mr. C's style and manner, we shall present our readers with his observations on what regards the patient who is to undergo an operation.

"Having said so much on those things which should be attended to by a surgeon respecting his own qualifications, let us now consider what is necessary for him to regard respecting his patient.

"Before undertaking any important operation several things are to

to be considered. These have been briefly expressed in the following Latin verse, which our forefathers have handed down to us:

Quis, quid, ubi, quibus auxiliis, cur, quomodo, quando.

"The state or condition of the patient is a matter of great importance, especially in those operations which are rendered necessary by previous disease, and are not suddenly required by serious accidents. It is proper especially to attend to his age, constitution, and to the present state of his general health; whether he be strong or debilitated, irritable and low; whether he appear fully equal to the operation, or whether there be any probability of his dying sooner in consequence of it.

"With regard to the disease itself, not only its nature is to be taken into the account, but also its particular situation; the length of time it has continued, and whether it be simple or accompanied with any peculiar circumstances which render a difference in the operation, or in the treatment, necessary.

"Why the operation should be performed is another consideration. Is it absolutely necessary? Is there any risk incurred by it? And if there be, Is the advantage expected fully equal to that risk? and is the probability of success sufficient to justify the exposure to it?

"In what is the operation itself to consist? and in what manner may it be most advantageously executed? By what instruments? With what dressing and bandage? Is any preparation by medicine needful? What attendants will be required to do all that is to be done, without confusion and embarrassment?

"What situation is most proper? On a bed, a table, or a chair? How should the patient and the operator be placed with respect to each other, and with respect to the light? And to what situation should the patient be removed afterward, and that he may be kept quiet, and under circumstances the most favourable to success?

"When should the operation be done? Is it necessary immediately, or how long may it be safely delayed; and what advantages are to be gained by delaying it, or what by performing it early?

"Let it not be thought that by considering these questions, an operator must become hesitating, timid, or unsettled. By no means. This can only happen to weaker minds. He who is habituated to reflect on these points with care, will not be on that account less prompt, bold, or firm, where promptitude, boldness, and firmness are required. The faculty of considering and judging, though complex and numerous in its operations, is comparatively easy when fully attained. Its different steps pass through the mind with wonderful rapidity. Like a new language, it consists of many parts, many words, and many idioms, which must first be learned by much application, pains, and practice; but when it is once acquired, the use of it is as easy as it is agreeable and useful.

"Supposing then an operation to be clearly indicated, and the period proper for performing it sufficiently evident, the next thing necessary

neceſſary is to prepare the mind of the patient, and to communicate to him the opinion that is formed on his caſe, with ſufficient delicacy, and yet with firmneſs. Let it be conſidered that the patient is an human being, poſſeſſed of the faculty of reaſon, alive to the ſenſe of pain, who has the greateſt burden of the caſe to bear, and demands all that tenderneſs from the ſurgeon which the ſurgeon would himſelf deſire in like circumſtances. If therefore the patient ſhould chance to be heſitating and irreſolute, if at the ſame time he ſhould be intelligent and judicious, the nature of the caſe may as far as poſſible be explained to him, and he may be reaſoned with reſpecting the neceſſity and urgency of the operation. But in reaſoning with a patient on ſuch a ſubject, the ſurgeon, who before has weighed all the circumſtances of the caſe, muſt not waver to the caprices of his patient, nor appear as though he were in doubt, merely becauſe his patient is ſo. Having once clearly, and on mature judgment, ſtated his opinion, unleſs any thing turn up really to demand a reconſideration of it, he will only diminiſh the reſpect and confidence which ought to be repoſed in him, by appearing over candid and pliable.

" But as all human judgment is liable to error, it is ſeldom proper, eſpecially in dangerous or complicated caſes, to refuſe a conſultation with any perſon of fair character and approved abilities. In moſt caſes, before any of the more ſerious operations, particularly when the patient is a perſon of rank, or of large connections in life, two opinions are more ſatisfactory than one. The blame which illiberal and uninformed people are always ready to throw on the want of ſucceſs, and the ſuſpicions which may ſometimes ariſe in the minds of perſons of a more honourable character, who may hear the caſe but imperfectly detailed, and yet be aſked for their opinion, will be more effectually precluded by the concurrence of two perſons, than by the ſingle judgment of one; eſpecially if he be young, comparatively of but little experience, or but little known.

" In peruſing the works of ſome of the older ſurgeons, one is almoſt frightened to ſee the load of inſtruments they have delineated; and can ſcarcely help ſighing over the miſerable patients who were ſo unfortunate as to be ſcrewed, and bored, and mangled, with what look more like machines for torture than inſtruments of relief. No doubt, in many of their contrivances, they totally loſt ſight of the difference between a dead and a living body, and reaſoned like carpenters, rather than ſurgeons. They were alſo too fond of parade, and a pompous appearance. If a knife were not crooked, and its handle carved, and its caſe of a certain formal make, they would almoſt have diſdained to uſe it. But " the more ſimple our inſtruments are, the better. " Our fingers are our firſt and principal inſtruments; and that " capacity and knowledge by which they are to be guided, " is the univerſal inſtrument, without which all the reſt will " be uſeleſs."

" Sometimes during the performance of an operation, accidents occur,

occur, which greatly try the firmneſs, patience, and ability of the ſurgeon. The diviſion of a large artery unexpectedly, or the diſcovery of new circumſtances in the diſeaſe, tend naturally to confuſe and agitate the mind. But at the moment when theſe things occur, he ſhould endeavour to recollect that time is not now to be waſted by regretting what is paſt, or thinking how it might have been avoided—All that will be proper afterward; but now, he muſt promptly and at once conſider what is actually the caſe, juſt as if he were then firſt called to it, and act according to the preſent exigency. In this power of ſuddenly turning the mind off from the former appearance of the caſe to the preſent, juſt as it would be turned to the caſe of another patient who might preſent himſelf, conſiſts much of that ſkill and ſelf-poſſeſſion, which has uſually diſtinguiſhed great operators. It is ſaid of that moſt accompliſhed admiral, Sir Francis Drake, who experienced the greateſt reverſes and difficulties in his profeſſion, perhaps, of any man on record, that when thrown into a new and perplexed ſituation, his mind immediately, and almoſt inſtinctively, went to work, contriving how to extricate himſelf from it; and that he was never heard on ſuch occaſions to ſpend a moment in reflecting on what was paſt, or ſpeculating on what might come, but was at once, inſtantaneouſly, as it were, and wholly employed in thinking what was to be done under the exiſting circumſtances, juſt as though he had expected them to happen. Such a diſpoſition I would recommend every ſurgeon to cultivate; but if he would ſucceed in this attempt, he muſt remember, it can only reſult from a thorough knowledge of his profeſſion, and is not to be the reward of ignorance, or raſhneſs."

MEDICAL AND PHYSICAL INTELLIGENCE.

Prof. HARLES relates in Huſeland's Journal, (vol. ix.) a remarkable caſe of morbus maculoſus hæmorrhagicus, attended with dropſy; but as the whole hiſtory of it is too long to be inſerted in this Journal, we ſhall content ourſelves in communicating the moſt eſſential reſults the Profeſſor has adjoined to this hiſtory, which are as follow: 1. The morbus maculoſus hæmorrhagicus and the chronical petechiæ, or petechiæ ſine febre, are, both with reſpect to their form and nature, one and the ſame diſeaſe, as appears from the deſcription of the caſes of theſe diſeaſes given by different authors. 2. The chronical petechiæ and the petechial fever, or the malignant petechiæ, eſſentially differ from each other, and only agree ſomewhat in the external appearance of the ſpots. The acute or malignant petechiæ are diſtinguiſhed from the chronical ones by being attended with a fever of the typhus kind, or ſometimes being a high degree of ſynochus and with ſymptoms evidently ſhow-

ing a ſtatus nervoſus, and by being moſtly epidemic. Both diſeaſes however, have a great ſimilarity in the ſpots, though in the chronical petechiæ, vibices, ecchymoſes, and other irregular ſpots, are frequently remarked, but which ſeldom occur in the petechial fever. 3. The real ſcurvy and the chronical petechiæ are two diſeaſes eſſentially different from one another. The ſea-ſcurvy is attended with a greater debility of the muſcular fibre, want of digeſtion, pains in all the muſcles, difficult breathing, ſwelling and bleeding of the gums, &c. The ſpots are more of a violet, and ſometimes of a yellowiſh colour, and in its laſt ſtage hæmorrhages and gangrene of the lungs come on; malignant ulcers are alſo frequently obſerved, &c. 4. All theſe diſeaſes agree in having their origin in a particular morbid ſtate of the venous blood in the ſmaller cutaneous veſſels; and they ſeem to prove that there probably exiſt humoral diſeaſes. This, however, Mr. Harles intends to ſhow more extenſively in a publication that is ſhortly to appear "In the Apology for Humoral Diſeaſes," with which we ſhall not fail to acquaint our readers more fully as ſoon as it comes to our hands.

Mr. Brefeld has made ſome remarks on the uſe of oils, which have ſometimes been applied with ſucceſs in arthritic complaints. In order to explain their action, he conceives the following idea of the nature of gout. He ſtates, that the gout originates in a corruption of the ſynovial liquor, which is probably a rancidity of it, as, according to chemical analyſis, the ſynovial liquor ſeems to poſſeſs the properties of groſs oils, and is conſequently expoſed to the ſame chemical laws For curing the gout, it is chiefly requiſite to correct the corruption of the ſynovial liquor, and to prevent its becoming any more rancid; the firſt of which is effected by the groſs oils, by involving the acrimony of it, and rendering it thereby more fit for being abſorbed by the lymphatic veſſels, and removed from the body by the purifying organs. Though this may be obtained, the defect of that liquor replaced, and the increaſed action in the ſolidum vivum diminiſhed by the application of groſs oils, yet there are caſes in which corroborant remedies are required for preventing the rancidity of the ſynovial liquor. Mr. Brefeld relates a caſe of a young man who was cured of the gout, attended with a cough, by taking ſeveral times a day a ſpoon full of ſweet oil, and by frictions of ſweet oil and camphor applied between the ſhoulders.

The ſame gentleman recommends waſhing of the belly with cold water, as of great avail in dyſentery. For, ſays he, thereby the ſolid parts are not only ſtrengthened, and the increaſed tendency of the fluids to corruption greatly counteracted, but it likewiſe excites motions by which any obſtructions are removed, the inflammatory and eryſipelatous ſtate of the bowels, and the topical ſenſibility of the affected parts, in a great meaſure, diminiſhed. He found it of good effect in a dyſenteric epidemy, to drink cold water;

water; and frequently, when opiates and antimonials were without advantage, cold water, repeatedly drank, diminiſhed the pains in a ſhort time, and rendered the ſtools feculent: When the patients were much debilitated, it was mixed with a little wine.

Citizen LASSUS relates an intereſting caſe of the deleterious effects of opium. A woman, ſixty years of age, who had been frequently attacked by fits of melancholy, ſwallowed about midnight 36 grains of opium. Five or ſix hours after, ſhe was found to be faſt aſleep, her reſpiration rattling like that of an apoplectic perſon. She recovered, however, for a few moments, ſo as to be able to inform thoſe who attended her, of the quantity of opium ſhe had taken. Ipecacuanha was adminiſtered, but without producing vomiting; after which a few table ſpoons full of vinegar were given to her, which ſhe ſwallowed with much difficulty. It was at this time that Cit. Laſſus ſaw her. She was not ſenſible of what was paſſing around her, and not the leaſt ſign of feeling was left. The reſpiration was attended with noiſe and difficulty, the ſkin moiſt, the pulſe quick, and the pupils of both eyes were conſiderably dilated; the joints were flexible, and every muſcle in a ſtate of relaxation. She died about eleven hours after ſhe had taken the opium.

On diſſecting the body, all the inner ſuperficies of the ſtomach was found inflamed, and likewiſe eroded in ſeveral parts. The inflammation extended itſelf through all the ſmall inteſtines in which large gangrenous ſpots of a greeniſh colour were obſerved. The cavity of the ſtomach contained about ſix table ſpoons full of a turbid liquor of a reddiſh colour, conſiſting of vinegar, ipecacuanha, of the gaſtric liquor, and probably of opium, the laſt being ſo perfectly diſſolved that not the ſmalleſt particle could be traced in it. The ſmall inteſtines were much relaxed, but the cœcum and colon inflated; the reſt of the inteſtines were in a ſound ſtate. There was nothing preternatural found in the brain; and the veins were neither filled with too much blood, nor did the ventricles of the brain contain ſerum; in ſhort, the deleterious effects were confined to the ſtomach and ſmall inteſtines. It appears, therefore, as the author remarks, 1. That opium, when taken in a great quantity, does not cauſe apoplexy, i. e. it produces no congeſtions of the blood in the brain; 2. That the ſooner it is diſſolved in the ſtomach, the ſooner it occaſions, by its irritation, an inflammation which at laſt ends in gangrene; 3. That vegetable acids, which have been ſo much praiſed as antidotes, have no effect at all, unleſs the opium has been taken in ſmall doſes.

Cit. SAUCEROTTE communicates, in the ſame work, a very uncommon caſe of a preternatural ſwelling and growth of the bones. A man of middle ſize, in the 35th year of his age, obſerved that all the bones of his body, the teeth excepted, were growing thicker by degrees, but without increaſing in length, and continued advancing till they had reached to double their natural thickneſs. The muſcles and fleſhy parts became relaxed and ſoft, but without

ſeemingly to decreaſe in ſize; the bones of the ſkull had ſo much increaſed, that the head was of a prodigious appearance, and the eyes protuberated from the thickneſs of the bones of the orbita; the ribs touched one another, and the ſternum, clavicula, and the ſcapula were uncommonly prominent; the flexibility of the joints was much impeded, and all the motions went on with difficulty. While the bones were thus increaſing, the patient became incapable of moving himſelf; he breathed with much trouble and difficulty; the pulſe was hardly to be felt; he ſuffered rheumatic pains in every part; and his urine was whitiſh with a ſtrong ſediment. After ſix years the bones ceaſed to grow, the pains diminiſhed, and the reſpiration became more free. In the ſeventh year, however, he died, after having ſuffered, about three months, the ſame complaints which he experienced during the growth of the bones. It is much to be regretted, that it was not permitted to open the body.

Cit. Boucher, in a memoir read before *la Societé d'Emulation at Abbeville*, has given ſome obſervations on elm-trees. Theſe trees are frequently attacked by ulcers, from which, at length, a great number of them periſh. *Du Hamel* had already endeavoured to find out the cauſe of this diſeaſe, and aſcribed it to a plethora of the ſap, an opinion which Cit. Boucher has confirmed by numerous experiments. He propoſes at the ſame time a remedy, which he ſucceſsfully applied to it. He obſerved that the local ulcer never attacked the trees on their north-ſide, but always on the ſouth ſide. It acts principally on trees planted in a boggy ſoil, and along the ſide of rivers. Its ſeat is generally not far from the ground. This ulcer, owing to a ſuperabundant ſap, differs from a ſimilar one, deſcribed in *Journal d'Hiſtoire Naturelle*, *No.* 5, 1789, as in this the liquor expoſed to the air, ſoon takes the conſiſtency of a gum, and has the flavour of ſugar.—The remedy conſiſts in boring every tree attacked by the diſeaſe, at the ulcer itſelf; and in applying a tube in the hole, occaſioned by the borer, penetrating about nine lines in depth. The ſound trees, which are alſo bored, afford no liquor, whereas thoſe that are ulcerated yield it in great abundance, increaſing particularly in fine weather, and when the wound is expoſed to the ſouth. Stormy weather and great winds ſtop the effuſion. In this manner, he remarks that the ulcers dry and heal in 48 hours. It is probable, that ſuch a terebration, tried on other vegetables, and particularly on fruit trees, will produce the ſame effects. *Pliny*, *Columella*, and *Palladius*, have already mentioned this expedient being employed by the ancients, which, however, has not been practiſed for many years.—Cit. Boucher concludes by remarking, that this tree is a native of Europe, and has not been lately introduced into France, as is commonly ſuppoſed; but the writings of the ancients prove, that it exiſted there long ago.—The chemical analyſis which he made of the ſap, ſhewed that it contained a conſiderable quantity of acetite of potaſh, a little acetite of lime, a certain quantity of vegetable or muco-ſaccharine matter, and a conſiderable

conſiderable proportion of muriate of lime; ſlight traces of ſulphate and muriate of potaſh were likewiſe perceived.

A Tranſlation of Mr. BAUDELOQUE's Reſearches and Reflections on the Ceſærean Operation, is in the preſs; to which will be added a Preface, Notes, and an Appendix, with ſix engravings, by JOHN HULL, M. D. Mancheſter.

A popular Medical Work, printed in a full and compact manner, will ſpeedily make its appearance from the experienced pen of Dr. ALEXANDER THOMSON. It will contain all the recent diſcoveries in the Practice of Phyſic, and a greater variety of matter than in any previous work of the ſame deſcription.

Several Phyſicians and Surgeons, in London, have aſſociated together for the purpoſe of writing An Extenſive MEDICAL ENCYCLOPÆDIA; or, An Entire Courſe of the Modern Practice of Phyſic and Surgery; including the Outlines of Anatomy, Phyſiology, Hygiene, Pathology, Noſology, Therapeutics, Midwifery, Pharmacy, Chemiſtry, Botany, and Medical Philoſophy; with references to the moſt approved Authors, and an explanation of technical terms; arranged alphabetically, and illuſtrated by numerous engravings. The whole work will be comprehended in two or three quarto volumes, forming a complete MEDICAL LIBRARY; and the names of the different Practitioners engaged in this undertaking are to be in the Proſpectus, which will ſpeedily appear. We underſtand, that it is intended to annex the ſignature of each writer to his own articles, after the manner of the French Encyclopædia; and that communications for the Editor may be addreſſed to any of the following bookſellers, viz. Meſſrs. Longman and Rees, Pater-Noſter Row; Cadell and Davies, Strand; Murray and Highley, Fleet Street; Vernor and Hood, Poultry; or Mr. Cuthell, Middle Row, Holborn.

Dr. BATTY will begin his Summer Courſe of Lectures on Midwifery and the Diſeaſes of Women and Children, on Monday the 8th of June, at half paſt ten o'clock in the morning.

Dr. REES purpoſes to commence his Summer Courſe of Lectures on Midwifery, on the 1ſt of June next: For particulars, enquire at his houſe, No. 11, Leiceſter Street, Leiceſter Square.

Mr. CARPUE will commence his Summer Courſe of Anatomical Lectures, on Monday, the 8th of June, at his houſe, No. 44, Leiceſter Square. Diſſecting will be continued under certain regulations. Particulars may be known by applying as above.

To the EDITORS.

Gentlemen,

As I am convinced it is your wiſh, that the intereſting publication under your management ſhould be an impartial regiſter of all uſeful information, I aſſure myſelf of your readineſs in admitting the following obſervations, occaſioned by an account that

that appeared in the Medical Journal of February laſt, of an artificial leg, invented by Mr. Potts.

Not having ſeen the inſtrument there recommended, I ſhall not of courſe attempt to call in queſtion its merits. The whole of my intention is, to point out an error Mr. Potts has fallen into, by aſſerting, that till the appearance of his invention, no artificial leg had been produced, in which the perſon uſing it was not obliged to make a ſemicircular motion with it in walking. Now, the following extract from Mr. Mann's deſcription of his patent leg, which I take the liberty of incloſing, will fully prove the miſtake. Mr. P. lies under. "Mr. Mann reſerves it for a perſonal conference with thoſe who may apply, to enter into a detail of particulars, contenting himſelf with aſſerting, that the external appearance of the artificial leg to be ſupplied under the ſanction of this patent, cannot be diſcriminated from the natural, and that the materials are at once light and durable; that it may be applied or taken off in a few moments, without the leaſt pain or trouble to the wearer; that the various circumſtances of ungracefulneſs, rigidity, and inconvenience, ſo viſible in other adſcititious members, are in this obviated; that, as it contains an anatomical and mechanical analogy to the ſeveral articulations to the knee, toes, and foot, and exerciſes all their functions per ſe, merely by being walked on, ſo in ſitting, riding, or ſtanding, it inſtantaneouſly accommodates itſelf to every flexure, extenſion, elevation, and attitude of the natural leg and foot, without any aid from the hand of the wearer, or other extrinſic application."

It is evident, therefore, that an artificial leg, poſſeſſing all the principal qualities aſcribed by Mr. P. to his invention, particularly the flexion of the knee-joint in walking, by which ſemicircular motion is avoided, and the ſelf-acting power by which it accommodates itſelf to almoſt any natural motion without any aſſiſtance from the hands, was ſeveral years ſince preſented to the public by Mr. Mann, of Bradford in Yorkſhire; and that his machine has been, and is conſidered worthy their attention, the following recommendation will teſtify.

"The public are hereby certified, that we think Mr. Mann's invention not only highly intereſting to all who have had the misfortune to loſe a leg, but worthy of the patronage of any profeſſional gentleman.

JOHN HUNTER, Surgeon General to his Majeſty's Forces.
T. KEATE, Surgeon to his Majeſty's Royal Hoſpital, Chelſea.
JOHN GUNNING, Maſter
W. GRINDALL, Warden
W. LUCAS, Warden
JOS. WARNER, Aſſiſtant
HENRY WADRON, Aſſiſtant
EDMUND PITTS, Aſſiſtant
JAMES PATCH, Aſſiſtant
W. COOPER, Aſſiſtant
} of the Corporation of Surgeons, London.

G. CHANDLER,

G. CHANDLER,
JOHN BIRCH,
HENRY CLINE,
} Surgeons to St. Thomas's Hospital.

W. HEY, Surgeon to the Infirmary, Leeds.

CHARLES WHITE, F. R. S. Surgeon to the Infirmary, Manchester."

On the comparative merits of the two inventions, experience will beſt determine, and to that teſt I wiſh to commit their reſpective claims; but in juſtice to Mr. Mann, I think it fair to aſſert his title to the credit of having *firſt* diſcovered, and introduced to public notice, an inſtrument ſo capable of alleviating one of the greateſt calamities incident to humanity.

I am, yours, &c.

April 11, 1801. T. R. REID, Surgeon, Chelſea.

TO CORRESPONDENTS.

We have received many useful and friendly hints from some of our Correſpondents, but are prevented from making the use we wish of them, on account of their being anonymous. The only occaſion, as we think, on which a Gentleman can find it neceſſary to write anonymously, is when he is desirous of communicating unſucceſsful or dangerous practice; and even in ſuch caſes, we alſo think, a private note ſhould be addreſſed to one of the Editors, containing the real name. We aſſure "A Reader and Contributor," *that we never will, knowingly, admit the Communications of any* "common advertiſing Quack;" *and if it has ever been done, it was inadvertently. If this Gentleman had favoured us with his name, we could have explained ſome things in his letter to his ſatisfaction.*

Mr. Bailey's Communication with the Engraving, ſhall appear in our next.

Advertiſement to the Medical World.

THE Proprietors of the periodical work, entitled THE LONDON MEDICAL REVIEW and MAGAZINE, having determined in future to confine the object of that work *ſolely* to a full and comprehenſive analyſis of NEW MEDICAL BOOKS, domeſtic and foreign; and having agreed to recommend their friendly Correſpondents to tranſmit their future communications to the MEDICAL and PHYSICAL JOURNAL, the Editors of the latter work announce this new and improved arrangement with much ſatisfaction, and earneſtly invite the Correſpondents of the London Medical Review and Magazine to honour them with their communications; aſſuring them, that they will on all occaſions be treated with due reſpect and diſtinction.

The

The Editors of the MEDICAL and PHYSICAL JOURNAL take this opportunity to repeat their acknowledgements to the medical world, for the continued and increaſed ſupport with which their exertions have been attended; and as THE MEDICAL and PHYSICAL JOURNAL will continue to be carried on *precisely upon the same plan, and with the same spirit as heretofore*, the Editors venture to promiſe their readers a conſiderable addition to the value of this work, from the acquiſition of the correſpondence which has hitherto been peculiar to the LONDON MEDICAL REVIEW and MAGAZINE.

This laſt mentioned work will in future be publiſhed as uſual, on the firſt day of every month, under the title of the LONDON MEDICAL REVIEW, and will recommend itſelf to a continuance of the patronage it has been honoured with, by the copiouſneſs and the independence of its criticiſms on every new publication which is connected with the ſtudies or purſuits of medical men. The plan of this work being, therefore, wholly different from that of the Medical and Phyſical Journal, the profeſſional reader will be able to indulge his peculiar views in the purchaſe of a periodical medical work, at half the previous expence. Thoſe who are in queſt of new facts, obſervations, experiments, and caſes, will conſult the MEDICAL and PHYSICAL JOURNAL, in which they will alſo meet with a Retroſpect neceſſarily brief, of all the novelties in medical literature; and thoſe who would enter more at large into the critical diſcuſſion and hiſtory of the practice of medicine, and its collateral ſciences, will probably feel a ſtrong intereſt in the peruſal of the LONDON MEDICAL REVIEW. Many gentlemen, who, not regarding the expence, determine to gratify themſelves by reading both works, will have the advantage, in conſequence of this arrangement, of not purchaſing the ſame intelligence twice over. In every point of view, the Editors of both works conſider the arrangement they have adopted as matter of congratulation to their friends and correſpondents, and they hope the public at large will be of the ſame opinion.

London, April 25, 1801.

THE

Medical and Phyſical Journal.

VOL. V.] JUNE, 1801. [NO. XXVIII.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

ENCLOSED is a drawing of a very curious and extenſive Exfoliation, which I ſend you for publication, if you think it of note ſufficient to occupy a place in your Journal.

I am, &c.

Harwich, April, 1801. JOHN BAILEY.

As no practical inferences can be deduced from this caſe, its curioſity alone attracting obſervation, I ſhall, as briefly as poſſible, narrate its hiſtory.

Thomas Lay, the ſubject of this caſe, is a child of three and a half years of age; in September laſt he was attacked with meaſles, which were accompanied by a foreneſs of the throat, as is not unfrequently the caſe, and a ſlight exulceration of the gums on the right ſide. From the inattention and uncleanlineſs of the nurſe, the matter which exuded being ſuffered to remain, entirely eroded the gums; the teeth, loſing their ſupport, fell from the aveolar cavities, which were now left perfectly bare. At this period, which was more than two months ſubſequent to the attack of meaſles, I was requeſted to give my aſſiſtance.—On touching the parts with my finger, I found they admitted of much motion. The ſkin of the cheek was reddened and tumefied, and an offenſive diſcharge iſſued from the mouth and right noſtril. Some ſimple detergent application was uſed; decoctum cinchonæ cum acido ſulphurico was exhibited internally. After purſuing this plan for a week or ten days, the bone protruded ſo far as to impede the ſhutting of the mouth. From this time I began to looſen it daily with a pair of pocket forceps, and at the lapſe of a fortnight withdrew a complete half of the maxilla ſuperior, of which the drawing is a faithful repreſentation: a ſlight hæmorrhage followed, the aperture in the mouth ſoon cloſed, and the tumefaction of the cheek ſubſided.

The loſs of ſo conſiderable a portion of bone, it might be expected, would occaſion a good deal of deformity; but this is by

no means the caſe: there remains no further external veſtige of the diſeaſe than a ſlight retraction of the angle of the mouth.

REFERENCES TO THE PLATE.

FIG. I. ſhews the bone in ſitu.

a. The os naſi
b The ſymphyſis
c. The alveolar cavities
d. The infra orbitar foramen
e. The orbitar proceſs.

FIG. II. gives an under view of the bone.

f. The ſymphyſis
gg. The os palati
b. The alveolar cavities

FIG. III. gives an internal view.

i. The os palati
k. The ſymphyſis
l. The naſal proceſs
m. The orbitar proceſs, which when the bone was recently taken away, was nearly entire, but was broken off by an accident afterwards.

To Dr. WILLAN.

My dear Sir,

THOUGH I have already anſwered your obliging communication relative to the cow-pock, yet I cannot loſe the preſent opportunity of again enquiring in what particulars "this ſingular complaint, (to uſe your own words) illuſtrates my ideas even better than the ſmall-pox?" Pray give me every information you can; and be aſſured I will not be backward in following up every experiment my ſituation here will admit. Dr. Pearſon's threads were ſo long in their paſſage, that I was fearful of hazarding the reputation of the new practice on ſuch materials. I have, however, procured a cow to make the firſt eſſay on; and if the experiment is completed before the veſſel ſails, will acquaint you with the reſult.

In the mean time, it is much my wiſh to refer you to a paper of Dr. Haygarth's, in No. XIII. (Vol. iii. page 198) of the Medical Journal, entitled, "Of Fever from the Venereal Poiſon." You need only peruſe the paſſage to ſee, that, according to the doctrine of Mr. Hunter, (and may I add myſelf?) Dr. Haygarth ſhould have written, "from a *morbid*," inſtead of 'from the venereal poiſon." Having already ſhewn my reſpect for this ingenious writer, by adopting his language, and availing myſelf of his facts, (ſee "Morbid Poiſons," pages 49, 51, and 51,) he will not be offended that I differ from him on this occaſion.

Dr. Haygarth concludes his paper in the following words:— "Thus, in three ſucceſſive caſes, the venereal poiſon applied

to

Mr Bailey's Case of Exfoliation.

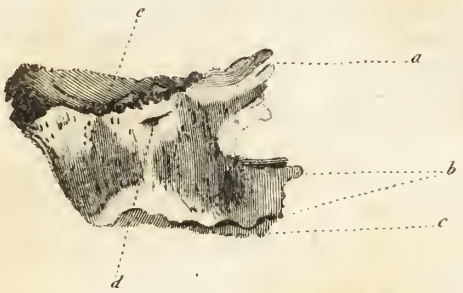

Fig. 1.

Fig. 2.

Fig. 3.

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to the finger, produced ſordid, ſpongy, painful, phagedænic ulcers, inflamed lymphatic abſorbents and glands, and manifeſt ſymptoms of a low nervous fever." In anſwer to this, it ſhould be recollected, that the ſpongy or phagedænic ulcer is not leſs remote than the low nervous fever from the character of the primary venereal ulcer or chancre; and alſo that fever has been detected in moſt, if not all, thoſe anomalous morbid poiſons which have been confounded with the venereal. Nor does this depend on the nature of the part affected, for in the following paſſage, which I tranſcribe from "Morbid Poiſons," to ſave you the trouble of referring to the work, the four laſt-mentioned caſes were ſeated on the penis.

"If we examine carefully the accounts of all the tooth caſes, we ſhall find moſt, if not all of them, attended with fever during their whole ſtage. Sir W. Watſon and Dr. Lettſom mention it particularly in the caſes they relate, and Mr. Hunter in moſt of thoſe, the whole progreſs of which fell under his inſpection. Mr. French particularizes fever in the caſe of ſloughing of the glands before alluded to. I have remarked it in the caſe of ſloughing phagedæna. The ſame may be traced in the caſe related in Edin. Medic. Eſſays; and Turner deſcribes his patient as delirious with fever and a miliary eruption *."

Dr. Haygarth's firſt caſe was followed by ſecondary ſymptoms, and "a formidable acceſſion of fever." Now, though the ſecondary ſymptoms from venereal virus are uſually attended with fever, yet it is never ſuch as would admit of the above deſcription from a writer of that gentleman's accuracy. It is moſt commonly ſo ſlight as to be overlooked altogether, and when greateſt, never exceeds the common ſymptoms of mild hectic, recurring for a few days at regular periods, afterwards remitting, and then recurring with its former apparent regularity.

I am aware it may be urged, that if theſe diſeaſes all yield to mercury, it is of little conſequence whether they are venereal or no. But it is hardly neceſſary to remind you, that though we might by analogy expect the ſame relief in all thoſe morbid poiſons which, like the venereal, do not leave the conſtitution after a critical fever, yet experience convinces us we are too often diſappointed: beſides this, the reputation of the ſex, or the tranquillity of the *inrupta copula*, is often involved in the queſtion. Need I add, that had ſome writers of the preſent day been more accurate in the deſcription of local ſymptoms, much of that ACIDITY and gall might have been ſpared, which

* See "Morbid Poiſons," page 146. Johnſon, 1796.

have been expended in the controverſy concerning new remedies.

After all, we are much obliged to Dr. Haygarth for his three valuable caſes, and the more ſo, as the local appearances are ſo accurately deſcribed. Be ſo good as to acquaint him with my objection to his inferences, in any manner you pleaſe; but if the Editors of the Journal can find room, it would be deſirable to make them as public as Dr. Haygarth's remarks.

I remain, my dear Sir,

Your ſincere friend,

Madeira, Jan. 14, 1801. JOSEPH ADAMS.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

IN this enlightened age of ingenious inquiry and bold experiments, when medical men introduce into practice drugs, deemed by our predeceſſors not only pernicious but fatally deſtructive, ſuch as arſenic, cicuta, belladona, digitalis, and many others, which in modified doſes, and judicious adminiſtration, have by their uſe lately effected, in various caſes, extraordinary cures, it may not perhaps be thought preſumption in me to offer to the faculty another medicine, of ſuch high rank in the catalogue of poiſons, that the firſt time I heard it propoſed in conſultation, I pauſed, dreading its conſequence.

The caſe was that of a lady, about fifty-five years old, who from the age of forty-ſeven had ceaſed to menſtruate, but from that time had been ſubject to periodic diſcharges of blood from the hæmorrhoidal veſſels; and if at any time thoſe hæmorrhages, from any cauſe, were ſuppreſſed, violent head-ach, ſpaſmodic affections of the inteſtines, alarming palpitation of the heart, intermittent pulſe, with rigors and cold ſweats, were the conſequence; thoſe ſymptoms uſually yielded to the application of leeches to the hæmorrhoidal veins, gentle purges, and the uſe of ſaline draughts. On a ſeverer attack than uſual, I conceived it neceſſary to propoſe a conſultation, and a gentleman eminent in his profeſſion was called in, who, after having heard the particulars of the caſe related, and examined the patient, propoſed laurel water, the medicine alluded to above, of whoſe innocence, in ſmall doſes, he gave me the ſtrongeſt aſſurances, at the ſame time inſtancing its powerful effects in obſtructions of the viſcera, eſpecially in liver caſes. To his explanations I

ſubmitted

ſubmitted my faith, and agreed to its being given, the preſent caſe being an eligible preſentation for its trial; accordingly, ten drops were ordered to be taken, in a little mint water, three times a day; but the two firſt doſes producing ſo copious a perſpiration that I hardly ever before had ſeen, its further uſe was for the preſent ſuſpended.

From the time the ſweat began to break out, the patient was greatly relieved; in a ſhort time all the ſymptoms diminiſhed, and, in a few days, ſhe was reſtored to her accuſtomed ſtate of health.

From that time I loſt ſight of the lady, but believe from repeating the laurel water in very reduced doſes, with the help of bitter extracts, ſhe enjoys better health than has been her condition for ſome years paſt.

I have ſince heard that this remedy has found its way into ſome of the foreign Pharmacopœias, but do not know preciſely into which.

I was not induced to write theſe obſervations from any warranted confidence in the efficacy of the above-mentioned extraordinary active medicine, having only ſeen it given in one ſolitary inſtance; but as a hint to ſuch gentlemen who are in the habit of making experiments with heroic medicines for the benefit of mankind. I am, &c.

Great Ruſſel Street, Bloomsbury,
May 21, 1801.

J. ROGERS.

P. S. Since I wrote the above on laurel water, I have accidentally laid my hand on D. Jacob Reinbold Spielman's Pharmacopœia Generalis, publiſhed at Straſburgh, in 1783, in which, after claſſing and characterizing the laurocerauſus, he ſpeaks of its diſtilled water as follows: "Aquam inde diſtillatam tam brutis, quam hominibus venenatam eſſe, teſtantur obſervatores; eandem ad guttas ſexaginta aliquoties de die datam potentiſſimum viſcidi tenacis reſolvendi remedium eſſe."

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

ALTHOUGH the honeſt oppoſition which has been made to the uſe of nitrous acid as a ſubſtitute for mercury in the venereal diſeaſe, is ſaid to have ariſen from prejudice or avarice, and to have been continued by malicious cabals, or foul practices,

tices,* I ſtill venture to expreſs my conviction, that the latter remedy will never ſupplant the former. There is even cauſe to ſuſpect that the confident aſſertions of ſome Britiſh practitioners on this ſubject, have diminiſhed their credit in other reſpects among our medical brethren upon the continent; this appears from different publications that have fallen into my hands, and from none more clearly than a paſſage in a recent work of Dr. Aubert on the Cow-pox.†

A correſpondent of yours, who boaſts that he has arrived, "if enquirers ever did arrive," at inconteſtible certainty, ſeems nevertheleſs willing to adopt a method of aſcertaining the anti-venereal virtues of the acid, which muſt bring this controverſy "at once to a deciſive iſſue." I beg leave therefore, to aſſure you of my readineſs to concur with any number of reſpectable practitioners in the execution of ſo deſirable a plan: It is my wiſh, however, to ſtand forward rather as an obſerver than a coadjutor, to mark what can be effected by others, rather than to interfere with their meaſures. The part I have already taken in this inveſtigation,‡ forbids me to hope for complete ſucceſs in any future attempt; but it becomes me not to ſhrink from any further degree of trouble which my opponents deem requiſite to aſcertain the truth. I am, &c.

W. BLAIR.

Great Ruſſell Street
May 23, 1801.

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* See Dr. Beddoes's Communication. London, 1800, 8vo. at pages 5, 9, 43, 52, &c.

† "*Pouvons-nous croire ſans réſerve ce que les Anglais affirment?*

Les médecins de cette nation ſont, à juſte titre, eſtimés dans tous les pays; mais cet ordre reſpectable renferme quelques novateurs qu'on ſuſpecte, et dont on ſe défie avec raiſon. Ce ſont ces derniers qui ont fait dire aux Allemands, que les Anglais ſont empiriques, et au Français, qu'ils annoncent ſouvent des fait qui n'ont aucune réalite; on pourrait citer entrautres les cures nombreuſes attribuées aux acides nitrique, muriatique, &c. que l'experience a démenties a Paris; ou l'on employa ces nouveaux remèdes contre le venin ſyphilitique, pendant long-tems, avec laplus ſcrupuleuſe exactitude, et toujours ſans ſuccès, on du moins, ſans que ces médicamens détruiſiſſent les effets du virus ſyphilitique auſi complétement et d'une manière auſi ſure, qu'on l'avait annoncé. On pourrait rappeler encore les merveilles de la médicine pneumato-chimique, ſi vantée par BEDDOES, et rejetée à cette heure, par l'auteur même qui l'avoit prônée."

Rapport ſur le Cow-pox, par A. AUBERT, *D. M. Diſcours Préliminaire, p. vii.*

‡ Eſſays on the Venereal Diſeaſe, Part I. and II. Symonds, London, 1799 and 1800.

To

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

TO relieve the ſufferings and calamities to which diſeaſe, in its various forms, ſubjects the human race, ſeems to be the moſt illuſtrious ornament we can boaſt of. To attain ſuch an important end, a ſtrict attention to medical diſquiſitions, together with practical inferences, is an eſſential requiſite. Through the medium of your uſeful Journal, we have already experienced the benefit of many intereſting communications. The Vaccine Inoculation, Hydrocephalus, Epilepſy, the Uſe of Digitalis in Pulmonary Conſumption, have all been largely diſcuſſed. I heartily congratulate you upon the high eſtimation your publication ſeems to poſſeſs, and further wiſh it may meet with that general attention its importance ſo juſtly merits.

In retracing the ſubject of epilepſy, I find practitioners ſeem to differ in their opinion reſpecting the ſucceſs of the nitrate of ſilver, as a remedy in that alarming diſeaſe. Some ſpeak of its uſe as nearly approximating to a ſpecific; others, again, ſeem to depreciate its efficacy. There ſeems to be a wiſh for novelty implanted in the human breaſt; conſequently, it is not to be wondered, that when any new remedy is propoſed, that the humane practitioner, not ſatisfied with the former treatment recommended, eagerly embraces the new one, as a probable means of relieving the ſufferings of his patient. This, I apprehend, has been the caſe in Epilepſy; the arg. nit. being ſuppoſed a ſpecific, is indiſcriminately employed; and the practitioner, although flu̇ſhed with the moſt ſanguine hopes of ſucceſs, is frequently diſappointed. Such a want of ſucceſs muſt to every one be particularly obvious. It appears extremely abſurd to imagine that any one medicine, although poſſeſſed of very ſtrong powers, can be adequate to arreſt the progreſs of a diſeaſe depending upon ſuch oppoſite cauſes. It would, I apprehend, be adviſeable to draw a line of diſtinction, and ſpecify in what caſes its adminiſtration ſhould be depended upon, and in what caſes of epilepſy its uſe ſhould be avoided; otherwiſe, the frequent failures ariſing from its general uſe, will ſtrongly militate againſt a remedy which, if judiciouſly employed, will, I flatter myſelf, rank high amongſt thoſe medicines called anti-eleptics, or, more properly, ſuch ſubſtances as have a power of allaying inordinate motions in the body, particularly thoſe irregular contractions which, from peculiar cauſes, take place in the muſcular ſyſtem. I beg leave to ſtate the termination of ſeven epileptic caſes; and, for the ſake of being impartial,

ſhall

ſhall particularize both the ſucceſsful and unſucceſsful ones, as they occurred under the influence of the argentum nitratum.—The medicine was begun in ſmall doſes, and gradually increaſed.

The two out of three unſucceſsful caſes were patients about forty years of age; had been for ſeveral years afflicted with moſt alarming fits, which were frequent in occurrence. They could aſſign no cauſe reſpecting the origin of the complaint. The following particulars were obſervable in theſe two patients: The ſtomach and bowels were much affected with dyſpeptic ſymptoms, great mobility and irritability of the nervous ſyſtem, the tunica albuginea of a white bluiſh colour, attended with a dullneſs of the eye itſelf; the features ſharp, complexion pale, a conſiderable want of expreſſion in the countenance; the apprehenſion dull. The fits were always preceded by general torpor accompanied with vertigo, which were remarkably violent, and attended with an abolition of conſciouſneſs. After the paroxyſm the patients were, for ſeveral days, very languid; and it required a conſiderable time before the aſſociation of ideas could be called regular. It is probable that caſes of this kind depend upon ſome organic affection; and to effect a cure in ſuch caſes, I am afraid is yet beyond the power of the healing art. The third unſucceſsful caſe was a boy about 17, who was for ſeven years ſubject to epilepſy; might not the cauſe here depend upon a crooked ſpine, which was contracted when an infant?

In three out of four caſes, wherein the lunar cauſtic ſeemed advantageous, the patients were about 17 or 18 years old. The fourth, a poor woman, who gave ſuck to a child about a year old. In theſe four patients an aſthenic diatheſis was very conſpicuous; they had not, however, the appearance which was ſo evidently marked in the three unfavourable caſes. The cauſe in theſe four ſeemed to depend upon a want of excitement, induced in conſequence of weak and poor diet. Thus it appears that here debility was the exciting cauſe, the patients from ſome conſtitutional peculiarity being already prediſpoſed. But how, or in what, this peculiarity conſiſts I am totally unable to account for. It has, by writers of conſiderable eminence, been aſſerted that epilepſy from repetition becomes habitual, and, if I may be allowed the expreſſion, a diatheſis epileptica ſeems to take place; to arreſt, however, ſuch catenation, the arg. nitr. ſeems admirably calculated, joined with proper auxillaries, ſuch as diet, exerciſe, &c. And I believe it is only in ſuch caſes as the laſt, wherein we are to place our confidence upon this medicine. Convulſive motions often depend on other cauſes, i. e. worms, teething, accumulation of ſordes in the ſtomach, local irritations, &c. All theſe muſt be

treated

treated according to circumſtances, which can only be judged of by the practitioner at the time of their occurrence.

Thus, Gentlemen, have I ſtated, as impartially as poſſible, the reſult of my ſucceſs with the nitrate of ſilver, and ſhould be glad to hear if any of your Correſpondents, through their courſe of practice, ſhould meet with a ſimilar reſult. I forgot to mention, that in the four fortunate caſes, the patients have remained for twelve months free from any return of the fits.

I am extremely ſorry to find, that in medical inveſtigation a degree of reſentment ſeems amongſt diſputants to predominate over candor and generoſity, the true marks of real profeſſional worth. And in every ſcience where improvement is the aim, we ought invariably to be poſſeſſed of zeal without prejudice, and faith without fanaticiſm. I am, &c.

Garſtang, May 20, 1801. WILLIAM KNIPE.

On the Origin of the Vaccine Inoculation.

THE moſt important diſcoveries, when familiarized to the mind, are contemplated with indifference. Who now wonders at the diſcovery of America, or the circulation of the blood? There is, however, a period between the conception of a diſcovery and its mature birth, fraught with more pangs than war or women know; and there is no light, in which the human mind can be viewed, more intereſting than during this anxious period. Whenever, therefore, the author of any greatly uſeful invention details the progreſs of his own mind, during the completion of his plan, the hiſtory is peruſed with avidity. On theſe grounds, we conclude that our readers will be much ratified by the following narrative.

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" *I am induced to give the following concise History of the Origin of Vaccine Inoculation, from my frequently observing that those who only consider the subject cursorily, confound the casual Cow Pox with the Disease when excited by Inoculation.*

Bond Street, May 6, 1801. *EDWARD JENNER.*

" My inquiry into the nature of the Cow-pox commenced upwards of twenty-five years ago. My attention to this ſingular diſeaſe was firſt excited by obſerving, that among thoſe whom in the country I was frequently called upon to inoculate, many reſiſted every effort to give them the Small-pox. Theſe patients I found had undergone a diſeaſe they called the Cow-pox, contracted by milking Cows affected with a peculiar eruption on their teats. On inquiry, it appeared that it had been

known among the dairies time immemorial, and that a vague opinion prevailed that it was a preventive of the Small Pox. This opinion I found was, comparatively, new among them; for all the older farmers declared they had no such idea in their early days—a circumstance that seemed easily to be accounted for, from my knowing that the common people were very rarely inoculated for the Small-pox, till that practice was rendered general by the improved method introduced by the Suttons: so that the working people in the dairies were seldom put to the test of the preventive powers of the Cow-pox.

"In the course of the investigation of this subject, which, like all others of a complex and intricate nature, presented many difficulties, I found that some of those *who seemed to have undergone the Cow-pox*, nevertheless, on inoculation with the Small-pox, felt its influence just the same as if no disease had been communicated to them from the cow. This occurrence led me to enquire among the medical practitioners in the country around me, who all agreed in this sentiment, that the Cow-pox was not to be relied upon as a certain preventive of the Small-pox. This for a while damped but did not extinguish my ardour; for as I proceeded, I had the satisfaction to learn that the cow was subject to some varieties of spontaneous eruptions upon her teats; that they were all capable of communicating sores to the hands of the milkers; and that whatever sore was derived from the animal, was called in the dairy the Cow-pox. Thus I surmounted a great obstacle, and, in consequence, was led to form a distinction between these diseases, one of which only I have denominated the *true*, the others the *spurious*, Cow-pox, as they possess no specific power over the constitution. This impediment to my progress was not long removed, before another, of far greater magnitude in its appearances, started up. There were not wanting instances to prove, that when the true Cow-pox broke out among the cattle at a dairy, a person who had milked an infected animal, and had thereby apparently gone through the disease in common with others, was liable to receive the Small-pox afterwards. This, like the former obstacle, gave a painful check to my fond and aspiring hopes: but reflecting that the operations of Nature are generally uniform, and that it was not probable the human constitution (having undergone the Cow-pox) should in some instances be perfectly shielded from the Small-pox, and in many others remain unprotected, I resumed my labours with redoubled ardour. The result was fortunate; for I now discovered that the virus of Cow-pox was liable to undergo progressive changes, from the same causes precisely as that of Small-pox; and that when it was applied to the human skin in its degenerated state, it would produce the ulcerative effects in as great a degree as when it was

not

not decompoſed, and ſometimes far greater; but having loſt *its ſpecific properties*, it was incapable of producing that change upon the human frame which is requiſite to render it unſuſceptible of the variolous contagion: ſo that it became evident a perſon might milk a cow one day, and having caught the diſeaſe, be for ever ſecure; while another perſon, milking the ſame cow the next day, might feel the influence of the virus in ſuch a way, as to produce a ſore or ſores, and in conſequence of this might experience an indiſpoſition to a conſiderable extent; yet, as has been obſerved, the ſpecific quality being loſt, the conſtitution would receive no peculiar impreſſion.

" Here the cloſe analogy betwen the Virus of Small-pox and of Cow-pox becomes remarkably conſpicuous; ſince the former, when taken from a recent puſtule, and immediately uſed, gives the perfect Small-pox to the perſon on whom it is inoculated: but when taken in a far advanced ſtage of the diſeaſe, or when (although taken early) previouſly to its inſertion, it be expoſed to ſuch agents as, according to the eſtabliſhed laws of Nature, cauſe its decompoſition, it can no longer be relied on as effectual. This obſervation will fully explain the ſource of thoſe errors which have been committed by many inoculators of the Cow-pox. Conceiving the whole proceſs to be ſo extremely ſimple, as not to admit of a miſtake, they have been heedleſs about the ſtate of the Vaccine Virus; and finding it limpid, as part of it will be, even in an advanced ſtage of the puſtule, when the greater portion has been converted into a ſcab, they have felt an improper confidence, and ſometimes miſtaken a ſpurious puſtule, which the Vaccine fluid in this ſtate is capable of exciting, for that which poſſeſſes the perfect character.

" During the inveſtigation of the caſual Cow-pox, I was ſtruck with the idea that it might be practicable to propagate the diſeaſe by inocoulation, after the manner of the Small-pox, firſt from the Cow, and finally from one human being to another. I anxiouſly waited ſome time for an opportunity of putting this theory to the teſt. At length the period arrived. The firſt experiment was made upon a lad of the name of Phipps, in whoſe arm a little Vaccine Virus was inſerted, taken from the hand of a young woman who had been accidentally infected by a cow. Notwithſtanding the reſemblance which the puſtule, thus excited on the boy's arm, bore to variolous inoculation, yet as the indiſpoſition attending it was barely perceptible, I could ſcarcely perſuade myſelf the patient was ſecure from the Small-pox. However, on his being inoculated ſome months afterwards, it proved that he was ſecure. This caſe inſpired me with confidence; and as ſoon as I could again furniſh myſelf with virus from the Cow, I made an arrangement

ment for a ſeries of inoculations. A number of children were inoculated in ſucceſſion, one from the other; and after ſeveral months had elapſed, they were expoſed to the infection of the Small-pox; ſome by inoculation, others by variolous effluvia, and ſome in both ways; but they all reſiſted it. The reſult of theſe trials gradually led me into a wider field of experiment, which I went over not only with great attention but with painful ſolicitude. This became univerſally known through a Treatiſe publiſhed in June 1798. The reſult of my further experience was alſo brought forward in ſubſequent publications in the two ſucceeding years, 1799 and 1800. The diſtruſt and ſcepticiſm which naturally aroſe in the minds of medical men, on my firſt announcing ſo unexpected a diſcovery, has now nearly diſappeared. Many hundreds of them, from actual experience, have given their atteſtations that the inoculated Cow Pox proves a perfect ſecurity againſt the Small Pox; and I ſhall probably be within compaſs if I ſay, thouſands are ready to follow their example; for the ſcope that this inoculation has now taken is immenſe. An hundred thouſand perſons, upon the ſmalleſt computation, have been inoculated in theſe realms. The numbers who have partaken of its benefits throughout Europe, and other parts of the globe, are incalculable; and it now becomes too manifeſt to admit of controverſy, that the annihilation of the Small-pox, the moſt dreadful ſcourge of the human ſpecies, muſt be the final reſult of this practice.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

THROUGH the medium of your intereſting Journal, the uſe of yeaſt in typhus and putrid fevers has ſeveral times been ſpoken of; could my practice add a mite to the ſtock of information, the duty I owe to my profeſſion would induce me to exert every ability in my power. If the following caſes are worthy of your inſertion, they are much at your ſervice.

I was requeſted to viſit Margaret Jackſon, aged 42, who had been ill for ſome time with putrid fever; ſhe was then delirious, her tongue, teeth, and lips were covered with a black fur, and ſhe had alſo a violent diarrhœa. I thought this a favourable opportunity for trying the yeaſt: I told the daughter, the time for medicine to be of ſervice was gone by, but if ſhe would attend punctually to my directions, I could lay down a plan that might poſſibly relieve her mother. The girl, anxious for her mother's recovery, (having left her place of ſervice

ſervice to nurſe her) promiſed ſhe would be punctual. Being a truly diſtreſſed family, I gave them money to purchaſe yeaſt, which I continued to do through their illneſs, as their ſituation would otherwiſe exclude them from getting a ſufficient quantity, and the caſe might be imperfect for the want of it. The woman continued taking it, diluted with water, until ſhe was perfectly recovered, without any other medical aſſiſtance, and there alſo ſeemed leſs proſtration of ſtrength when the fever was over, than I ever found in a patient before, conſidering the ſeverity of the diſeaſe and the melancholy circumſtances of the patient. A few days afterwards the huſband came home ill, and in twenty-four hours he was delirious; the ſymptoms nearly the ſame as the wife, excepting the huſband being very coſtive, which I, however, totally diſregarded, as I did the wife's diarrhœa, leaving Nature to take her own courſe. The huſband being fully convinced of the effect of the yeaſt on his wife, took it immediately, and continued it through the whole courſe of his delirium, rejecting every thing elſe until he was perfectly recovered. At the ſame time one of the daughters was taken ill, and by a deal of exertion, got down a conſiderable quantity, by which ſhe got quite well. Before this daughter got well the eldeſt was taken ill, and purſued the ſame plan, by which means ſhe alſo was perfectly recovered.

I am, &c.

Dispensary House, North Street, May 8, 1801.

W. D. ROLFE.

State of the Patients in the Briſtol Diſpenſary, from 1ſt of April to the 1ſt of May, 1801.

Typhus Fever	51	Small-Pox	2
Continued Fever	5	Cough and Dyſpnœa	3
Dropſy	10	Rheumatiſm	2
Tabes	6	Hæmoptoe	1
Paralyſis	1	Eryſipelas	3
Stomach Complaints	7	Nervous Affections	2
Amenorrhœa	1	Aſthma	3
Aſthenia	2	Pleuritic Affections	2
Peripneumonia	8	Hernia	1
Scrophula	3	Bilious Vomiting	2
Diarrhœa and Dyſentery	7	Phthiſis Pulmonalis	2

Account of Diſeaſes in an Eaſtern Diſtrict of London, from the 20th of April, to the 20th of May, 1801.

	No. of Caſes.		No. of Caſes.
ACUTE DISEASES.			
Typhus	14	Cynanche Tonſillarum	2
Pneumonia	7	Ophthalmia	2
		Apoplexia	2

CHRONIC

CHRONIC DISEASES.	
Cough	25
Dyſpnœa	15
Phthiſis Pulmonalis	5
Hydrothorax	3
Anaſarca	5
Cephalalgia	7
Vertigo	2
Hepatitis Chronica	2
Enterodynia	4
Diarrhœa	15
Dyſuria	2
Amenorrhœa	7
Fluor Albus	4
Chloroſis	3
Dyſpepſia	6
Vomitus	3
Herpes Puſtuloſus	4
Lumbago	2
Rheumatiſmus Chronicus	15
PUERPERAL DISEASES.	
Mania	1
Menorrhagia Lochialis	3
Lactea	2
Maſtodynia	3
INFANTILE DISEASES.	
Hydrocephalus Internus	1
Vermes	2
Febris	2
Diarrhœa	3
Herpes Miliaris	2

The fever which has ſo long raged, and which has been attended with various affections of the head, has for a few weeks appeared leſs frequently. This diſeaſe, however, has not entirely ſubſided: after a ſhort ſuſpenſion it has returned, but with leſs aggravation of ſymptoms, and the number of patients affected by it has been conſiderably leſs than formerly. Amongſt thoſe caſes which have been under the care of the Reporter, there have been ſome, the ſymptoms of which have differed from thoſe which occurred in former inſtances. Thoſe affections of the head, which in them formed ſo characteriſtic a feature, have been leſs frequent in their occurrence, and leſs violent in their effects. In ſome inſtances, affections of the reſpiratory organs have formed a more ſtriking ſymptom than thoſe of the head, and have rendered neceſſary the application of leeches, and of bliſters to the cheſt.

The influence which the paſſions of the mind have on the different functions of the ſyſtem, has long formed a ſubject of curious inveſtigation by the Metaphyſician and Pathologiſt. The debilitating effects of ſudden fear, or of long protracted grief, and the more immediately deſtructive influence of violent anger or rage, have been exemplified in too many painful inſtances; whilſt the more pleaſing effects of hope and joy have been felt in the general ſtate of health and ſpirits. The latter of theſe paſſions, however, when *ſuddenly* raiſed, or indulged to exceſs, has ſometimes been attended with fatal conſequences. In one of the inſtances of apoplexy referred to in the liſt of diſeaſes, the patient experienced a ſurprize of joy, at reading in the newſpaper of the arrival of a ſhip, in which a near relation was a paſſenger, concerning whoſe ſafety he had before expe-

experienced conſiderable anxiety. He immediately related the fact to a friend with great emotion, fell upon the floor with the paper in his hand, and in a few hours expired.

Prof. Hufeland on the Erysipelas of new-born Children.

THE Eryſipelas of new-born children is a diſeaſe which, on account of its rarity, is not ſufficiently known to practitioners. The danger, however, with which it is attended, renders this diſeaſe worthy of the attention of phyſicians, and its nature as well as mode of treatment, deſerve to be more fully aſcertained by farther reſearches. We find very little mentioned on this ſubject in medical books. The firſt who records ſeveral caſes of it is Bromfield, (Med. Com.); it is likewiſe mentioned by Girtanner; but the beſt account is given by Prof. Oſiander, of Gottingen, in his Memoirs for Phyſic and Midwifery.

The diſeaſe appears in the firſt days of life to the ſixth week, and there are only a few caſes recorded where children were born with it. Sometimes it is preceded by locked jaw and jaundice. At a ſingle place, or at ſeveral at once, particularly in the lower extremities, regio inguinis, the neck, &c. red ſpots appear; which being at firſt but little raiſed on the ſkin, extend themſelves afterwards, whereby the parts begin to ſwell, and become hard and painful. On preſſing the ſwelling with the finger, the ſpot where the finger is applied becomes white, but without leaving a dimple. The colour of the tumour is changed, and becomes dark red and blue; gangrenous bliſters and petechiæ appear; the joints affected by the diſeaſe become ſtiff, the belly tenſe, and locked jaw and jaundice ſometimes ſupervene a little before death comes on. The diſeaſe ſeems in ſome caſes to originate from the epidemical conſtitution, at leaſt Prof. Oſiander obſerved it at the time when many lying-in women were affected by bilious and rheumatic fevers. The remote cauſes of the diſeaſe are ſaid to be, bad diet of the mother, a corrupted atmoſphere in the nurſery, colds and paſſions of the mother or nurſe, as anger, fright, &c. obſtructed excretion of the meconium; all which cauſes ſeem to act upon the nerves of the belly, particularly on the organs for the ſecretion of the gall, and on the lymphatic ſyſtem, and vaſa lactea, by which the gall rendered acrimonious from the morbid irritation, is abſorbed, brought to the blood, and depoſited in the external parts. The prognoſis is doubtful, and the ſtrong or weak conſtitution of the child ſeems to make no great difference. A ſucceſsful event may be hoped according to Girtanner,

ner, when the eryſipelas is confined to ſingle places, and when it begins to ſuppurate, but when it extends itſelf to a greater ſurface, and firſt appears on the belly and genitals, or when gangrene ſupervenes, the prognoſis is very bad; though Bromfield ſucceeded in ſaving a child under theſe circumſtances. It proves certainly mortal, when the inteſtines are affected, or triſmus comes on. The diſeaſe laſts from 24 hours to a fortnight, and longer.

The method of cure which has been employed here, though on the whole with little avail, conſiſts in evacuating the inteſtinal canal by vomits, and purgatives of rhubarb, manna, magneſia, and clyſters, in removing the ſpaſm by flores zinci, opium, frictions with oil, and opium applied on the belly and the liver region, in promoting diaphoreſis by antimonials, ſpiritus Mindereri, warm baths, and at the tranſition of the inflammation to gangrene, in the external and internal uſe of the Peruvian bark, camphor, &c. The application of any preparation of lead is very noxious, as by repelling the eruption, it is likely to occaſion dangerous metaſtaſes towards the inteſtines. It is likewiſe not adviſable to make uſe of the bark and camphor, when the diſeaſe is ſtill in the inflammatory ſtage; though, according to Bromfield, it may be of great ſervice, when the eryſipelas threatens to become gangrenous. It ſeems, according to what Hufeland has obſerved, that on the whole, baths of warm milk, in combination with gentle diaphoretics and antiſpaſmodics, as valerian, flores zinci, and in ſome caſes the musk, are the beſt remedies for curing this dangerous infantile diſeaſe. On opening the body of children, who died of it, Prof. Oſiander remarked the following: The ſcrotum was ſwollen to the ſize of an egg, and at making an inciſion, a yellowiſh gelatinous matter iſſued, the veſſels were much extended by blood, the teſticles and penis not ſwollen, though their blood-veſſels were very red. The tela celluloſa between the integuments of the belly and the peritonæum contained alſo a great deal of that gelatinous matter, the veſſels being at the ſame time full of blood. The abdomen was much inflated, and filled with an orange coloured ſerum. The ſtomach was inflamed, and full of gangrenous ſpots; in one inſtance the inteſtines were much inflamed, and grown together by pſeudo membranes. Between the inteſtines a yellow puriform matter was here and there diſcovered, ſimilar to that which is found in perſons who die of hepatitis and puerperal fevers. Liver and ſpleen were likewiſe inflamed, blackiſh, and full of ſtagnant blood. The veſicula fellea contained half a drachm of black and thick gall; and, in another caſe, it was filled with a yellowiſh jelly, which was alſo contained in the vena umbilicalis. The pancreas was obdurated, and the lungs ſomewhat inflamed.

An

An improved Mode of applying Caustic to Strictures in the Urethra. By RICHARD CARTWRIGHT, Member of the Royal College of Surgeons in London, and Surgeon to the Naval Asylum.

MUCH has been said on the subject of strictures in the Urethra, and great difference of opinion has prevailed with regard to the best mode of removing them; but professional men have not differed so much on the nature of the remedy, as on the practicability of limiting its application. Few, I believe, would object to the use of caustic, provided it could be conveyed to the diseased part without affecting the sound part of the canal. How far that can be accomplished by the following mode of applying it, the reader himself will be able to judge. I have only to remark, that I have been in the habit of employing it in pretty extensive private practice for several years without the misfortune of experiencing one single instance of its failure, although many of the cases had been previously, but unsuccessfully, treated in the manner recommended by Mr. Home; and that I have never witnessed a single occurrence of any of the very alarming symptoms, which have occasionally followed the application of caustic by the armed bougie. This event was naturally to be expected, if we consider the difference in the extent of surface affected by the caustic applied in the mode here recommended, and in that of Mr. Home. I need not describe Mr. Home's mode of applying caustic by the armed bougie, which is now pretty generally known. The idea of a flexible canula will immediately suggest to every one the mode I have adopted; the great difficulty has been to procure a canula made in such a way as fully to answer the purpose. The late Mr. Wyatt, so long as twenty years ago, had canulæ made of the elastic gum with the same express view, but their sides were too thick, and the calibre so small, that he could not convey the caustic up the passage in the manner he intended.

The best canula consists of a web made of the finest silk or catgut, which is afterwards covered with the elastic gum, the inside of which has also a covering of the same gum. The sides of the canula ought to be as thin as possible, possessing sufficient elasticity to counteract the contraction of the urethra, and the end of it should have a few additional coverings of the gum to prevent its scraping in its passage along the canal. This with a stilet fitted to it, (for which the common plaster bougie serves the best) and another bougie of such a size as

to pass freely through the canula, with a little lunar caustic in fine powder, form the whole of the apparatus.

In order to avoid mistake, it will be advisable to have a white bougie for the stilet, and a black one for the purpose of carrying the caustic through the canula, upon which the quantity of caustic will be more readily discerned.

The stilet should fill up exactly that end of the canula which is to be introduced; and this it can easily be made to do, by moulding it a little with the fingers; the black bougie should be cut off at the broader end, that it may have the greatest flat surface, and on the other end a mark should be made to correspond with the length of the canula.

The manner of applying the caustic is then very simple. Pass the canula, fitted with its stilet, gently down to the stricture; withdraw the stilet, taking care to keep the canula steady in its place; then dip the flat end of the black bougie into the powdered caustic, so that the surface may be covered, and apply it with as much celerity as possible to the stricture, which application may be repeated two or three times, or more, as the operator may think proper.

In cold weather the black bougie will require to be warmed a little, in order to make the caustic adhere to its surface for the first application.*

The separation of the slough depending on the action of the part to which the caustic has been applied, will take place at different times under different circumstances. It will, however, seldom happen in less than two days, about which time I generally try to pass a bougie; and, should there be pus formed, I go on with the daily use of bougies alone, as long as the stricture dilates and the suppuration continues; but, should the suppuration stop before the stricture is removed, it will then be necessary to have recourse again to the use of the caustic.

The advantages which this mode of applying caustic to strictures in the urethra has over that by the armed bougie, are obvious. By means of the canula the caustic may be conveyed with great facility to any part of the canal, and may be as confined in its application as the operator may wish, however great the irritability of the urethra may be; and as to the pain

* The canula after being used, should be washed with cold water, wiped, and left to dry on a brass wire for a day or two, and should then be besmeared inside and outside with a little oil; and with these precautions one canula will serve for several hundred applications. Canulæ of all sizes may be had of Mr. Savigny, Surgeons' Instrument Maker, King Street, Covent Garden, London; and of Mr. Carlberg, Great Windmill Street, London.

pain occaſioned, the patient rarely feels more than is experienced in paſſing a common bougie, and frequently leſs. The cauſtic may thus be applied, of its full ſtrength, undiluted by mucus, blood, or urine. The ſlough from ſo partial and limited an application is neceſſarily ſmall, the inflammation very inconſiderable, and the hæmorrhage, if any, ſeldom exceeds a few drops of blood. I have never met with a caſe of ſwelled teſticle from the application of cauſtic through the canula. In ſome few inſtances there has been a ſlight ſuppreſſion of urine, which has always ſoon ſubſided under the cuſtomary remedies. This has been the greateſt inconvenience that enſued even in patients who indulged in every irregularity and exceſs of free living.

I am well convinced, from ample experience, that a patient labouring under ſtricture runs more riſk in ſubmitting to the treatment by bougies alone, than by cauſtic introduced through the canula. This may be accounted for from the inflammation attending the uſe of bougies extending further than that from the application of cauſtic, of which there can be little doubt in old obſtinate ſtrictures.

The public would long ago have been in poſſeſſion of this mode of applying cauſtic, had not many difficulties interpoſed in bringing the canula to its preſent ſtate of perfection.

It was my intention to have given a ſelection of the moſt intereſting caſes of ſtrictures which have fallen under my care, with practical obſervations on ſome effects of Strictures not hitherto noticed, as well as on the comparative utility of the common plaſter bougie and that of the elaſtic gum, which is now made of ſuch a pliability as readily to accommodate itſelf to the curvature of the urethra, and of ſufficient hardneſs to reſiſt the action from ſtricture. This I ſhall, however, reſerve to form the ſubject of a ſeparate publication at ſome future day.

POSTSCRIPT.

Since writing the above, a publication by Mr. Whately has fallen into my hands, propoſing an Improvement of Mr. Home's Plan of applying Cauſtic. The following are his directions how to prepare the bougie for that purpoſe. "Touch an eighth, or from that to a quarter of an inch, of the end of a bougie of any ſize, with a ſmall bruſh dipped in common glue, as uſed by mechanics; and let the coating of glue be as thin as poſſible. The glued end muſt be immediately applied to a given quantity of powdered lunar cauſtic, put upon a piece of writing paper; this ſhould be done by alternately putting its different ſides to the cauſtic, until the whole of it

adheres. The bougie in this ſtate muſt be laid in ſome dry place to harden, which effect will take place in a few hours. When it is ſufficiently hardened, the glued end muſt be gently rolled to and fro upon a table, with a bit of ſmooth wood, about four inches ſquare, till it is perfectly level and ſmooth. If the bougie be very hard, or the weather cold, this end muſt be previouſly warmed a little by the fire. The part thus covered with cauſtic ſhould then be very lightly rubbed with a bit of bees' wax, with the intention of giving it a very thin coating of this ſubſtance. After this, let it be kept for uſe in a glaſs veſſel well cloſed."

Now, admitting even that the cauſtic could really be applied, *of its full ſtrength*, in this way, there is one very obvious and inſuperable objection to this plan; that is to ſay, the miſchievous conſequences which muſt neceſſarily ariſe, on withdrawing the bougie, in the ſound part of the urethra, when the cauſtic is ſet at liberty by the ſolution of the glue. But as none of theſe miſchievous conſequences are ſtated by Mr. Whately to have enſued, I ſuſpect that he has deceived himſelf in ſuppoſing that he has been applying the cauſtic *in its full ſtrength*, which we know muſt certainly have been conſiderably weakened in its corroſive properties by its admixture with the glue, and its expoſure to the atmoſphere.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

THE following caſes of Cynanche Trachealis were tranſmitted to me by a very ingenious and reſpectable practitioner in Buckinghamſhire, for the purpoſe of being communicated to a medical ſociety in this metropolis. They are certainly worthy of greater publicity than they could have by being ſimply read before a confined number of profeſſional men, and I therefore requeſt the favour of you to inſert them in your widely circulated Journal. As I was not deſired to publiſh this communication, I do not feel myſelf at liberty to mention the name of the author, whoſe modeſty may render him averſe from appearing in print, and whoſe merit will daily accelerate his arrival at eminence without it.

Craven Street,
April 25, 1801.

I am, &c.
W. G. MATON.

February

February 5, 1801. At ten in the evening I saw the daughter of Colonel S. in this neighbourhood, who awoke from her sleep with a suffocating stricture upon her breath, accompanied with the peculiar sound characterising croup. She had during the day been observed to be hoarse as from a common cold, but was not otherwise unwell. The mother, having once before witnessed the croup, gave an emetic of antimon. tartaris, which operated powerfully, on the first alarm; by this the trumpet-like sound, and the difficulty of breathing were in a small degree diminished. But at the time of my first seeing her, about two hours after she had awoke, she still breathed very laboriously. The peculiar sound, the *suffocatio stridula* was chiefly perceptible on coughing and crying, at which times it was in the highest degree distressing.

I remained with her through the night. In about an hour after my arrival, her distress being extreme in breathing, and the sound increasing, I gave her another emetic, by which she was in some measure relieved. Four leeches were immediately applied to the throat, and their wounds encouraged to bleed by warm fomentations more than an hour and a half. Within a short time after they had ceased to bleed, two blisters of considerable size were laid on the throat.

The blisters acted quickly; and by the morning there was a manifest abatement of the symptoms, but the breathing was still difficult, and by no means free from the sound of croup. She had no mark of general illness, her skin being of the natural heat, and pulse, as far as could be judged, not unusually quick for a child of her age, which was two years and a half, varying considerably, however, after distressing fits of coughing or crying. The bowels were in a natural state.

A grain and a half of calomel was ordered to be given once in two hours in sugar, and a drachm of the mild mercurial ointment to be rubbed into the thighs carefully once in four hours. In the afternoon the symptoms increased again, and continued to do so until the morning of the 7th, from which time there was a gradual diminution of them to the evening of the 9th, after which the sound of croup was not heard more than two or three times, and then in the act of screaming. The breathing became natural, and the cough disappeared. In the whole she took forty-eight grains of calomel, and had rubbed in seven drachms of the ointment.

On the morning of the 7th, two other children in the same family, a boy of five, and a girl of four years old, were seized with symptoms of croup, which by the evening had increased to a high degree. Emetics were given, and four leeches, and two blisters applied in each case; by these, as in the former case,

caſe, an abatement of the diſeaſe was obtained, but by no means was it entirely removed. In a few hours after the action of theſe remedies was over, the difficulty of breathing with the ſtridulous ſound became more urgent, and the mercurial plan was begun immediately with both. At the end of three days, the boy had taken 59 grains, and the girl 52 grains of calomel. For the former, 10 drachms; and for the latter, 9 drachms of the *ſtrong* mercurial ointment were rubbed in within the ſame ſpace of time. Under the uſe of the mercury the diſeaſe ſubſided, and was not obſerved in any ſhape after the fifth day from the commencement of its employment.

On the 9th, an infant of four months, which had very lately recovered from a diarrhœa, that from its violence and long continuance had threatened to carry it off, was heard ſeveral times *to croup*; and its breathing became difficult, ſo that it could not well ſuck. An emetic was immediately given of ipecacuanha, and two leeches were ſoon after applied to the throat. The leeches uſed for this child were large, and made wounds which did not, in its weak ſtate, readily cloſe. Notwithſtanding many endeavours were made to ſtop the bleeding, it continued with little interruption for thirty hours; ſometimes it was a mere oozing, at other times it was very free. The child at length became ſo exhauſted, that it became neceſſary to give it frequently ſoft gruel with a ſmall proportion of wine. The bleeding ceaſed during an hour or two of great faintneſs; after which no mark of croup was ever obſerved. No other remedy was employed in this caſe. The child in a few days recovered from the effects of the bleeding, and ultimately became quite well.

In the three former of the above caſes, the ſymptoms of croup exiſted in a highly diſtreſſing degree; in neither of them was there any conſtitutional affection. In all, the effects of the remedies employed were the ſame. The force of the diſeaſe was broken by the firſt remedies, and more eſpecially, as it appeared, by the emetics, although in none was there any diſlodgement of the membranous matter lining the trachea in this diſeaſe, which has ſometimes happened. In all, the diſeaſe gave way to mercury. In theſe children the mercury produced no purgative nor conſtitutional effect whatever; I ſhould indeed have doubted if it had been fairly uſed in the quantity related, had I not been preſent during the greater part of their illneſs. The calomel was always entirely ſwallowed, and the ointment very diligently rubbed in. The curative effect of mercury in croup has been before eſtabliſhed in this part of the country, in which the diſeaſe is not very uncommon; and I believe the difficulty of ſo impregnating the ſyſtem with it as

to

to produce the common evidences, has been noticed by Dr. Rush and others, who have seen the utility of that remedy in this most distressing, and most rapid in its progress, of the diseases to which children are liable. I am not certain, since the introduction of mercury into the treatment of croup, whether too little use may not have been made of the older remedies. The event of these cases has convinced me that they have a powerful effect in breaking the force of the disease at its onset, although they have not in all instances a power of entirely destroying it. In the three first cases, the subjects of which were remarkably healthy, the peculiar inflammation of croup was not subdued by them. (It may be a question whether a larger number of leeches, &c. might not have cured the disease.) In the case of the infant, weakened by previous disease, and weakened now by excessive bleeding, no further remedy was required. The old plan, however, has often failed; the mercurial plan never I believe in this neighbourhood.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I Have sent you a case of an inveterate Eruption, occasioned by taking a "Quack Medicine," called Jesuit's Drops, for the lues venerea; and a case of Cardialgia, cured by the application of flannel; which, if you think worthy of a page in your Journal, you will oblige me by inserting them.

I am, &c.

Seaflower, Jersey,
March 16, 1801.

J. S. SWIFT, Surgeon.

HENRY KELLY, belonging to his Majesty's brig Seaflower, aged 42, of a robust habit of body, applied to me, Feb. 23, ult. for a universal scaly eruption, very red and itching, some the size of a crown piece. Upon enquiry, he confessed having taken a bottle of Jesuit's Drops, in December last, for the venereal disease; it first broke out about his scrotum and anus, a few days after he had finished the bottle; the only marks of the disease remaining were two chancres recently healed. He was discharged to duty March 10th inst. cured by the following treatment: R. G. camph. ʒj. ant. tart. op. a. ℈ss. mucil. q. s. f. pil. xx. omne nocte sumendus. R. Ung. ceræ. ʒij. hydr. nitrat. rub. g. camph. a. ʒj. M. applic. parti. bis die. Purgatives

gatives were taken occaſionally; the pills cauſed a ſlight nauſea a few nights. 26th, I added a drachm of opium to the ointment, to allay the itching, which was very great when in bed. March 1ſt, Complained of great weakneſs, particularly in his knees: R. Hauſt cort. Peruv. quotidie.

Thomas Williams for a long time was afflicted with cardialgia, had taken magn. alb. cret. kali, &c. without much benefit. Having known diarrhœas and colics brought on by only leaving off a cloth waiſtcoat and putting on a linen one, it ſtruck me very probably it was occaſioned by a deficiency of external warmth, I therefore applied a double piece of flannel upon his ſtomach, and had the pleaſure to find him the day following much relieved. In the ſpace of ſix days he was totally free from the leaſt ſymptom of his complaint, and has continued ſo ever ſince, which is nearly three weeks.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IF the following caſe be worth inſertion in your valuable Journal, you will oblige me by letting it appear in your next number.

I am induced to think it is attended with a circumſtance ſcarcely, if at all, noticed by modern writers, (at leaſt that have come within my own reading) and which I recollect only in Celſus.

Sarah Harding, ætat. 18, the daughter of a carpenter, at Warnham, near this place, conſulted me for an encyſted tumor of the ſteatomatous kind, ſituated upon the left eye, and extending from the roots of the hair on the ſuperior part of the forehead to the lower part of the eye-lid. She informed me it firſt appeared when an infant of four months old, had gradually increaſed to the preſent time, and although for many years it had not been attended with either pain or inconvenience, was now become troubleſome, as well from its preſſure upon the eye, as from the deformity occaſioned by the depreſſion of the eye-lid, which was half cloſed by the weight of the tumor.

I gave her decidedly my opinion that nothing but extirpation would be of the leaſt uſe; and having convinced her of the propriety of the operation, ſhe conſented to its being performed. I operated upon it in the preſence of Mr. Krazeiſen, a gentleman from the York Hoſpital, who is charged with the

care

care of the ſick in the barracks at this place, and who did me the favour to aſſiſt me in the operation.

On dividing the common integuments upon the ſac of the tumor, I found it adhering firmly at the bottom, and that in order to guard againſt a freſh accumulation of the ſame kind, it was neceſſary to diſſect it out through its whole extent. On puncturing the cyſt, I was aſtoniſhed to find half its contents to conſiſt of hair, in colour and length exactly correſponding with that on the eye-brow, partly looſe, and partly adhering to the bottom of the ſac. The loſs of blood in the operation, although pretty conſiderable, did not ſeem to call for the neceſſity of any ligature, as from the veſſels lying ſo immediately upon the os-frontis, compreſſion was all that was required; and having ſecured the wound by two ſtitches and ſlips of adheſive plaiſter, it healed very well by the firſt intention, and my patient is at this time in good health. In conſequence of a ſpaſmodic affection of the eye, I directed for her a draught for a few evenings, compoſed of Pulv. ipecac. comp. ℈j. and ſpt. ætheris. vitriolici. ℥ſs. and, with an occaſional ſaline cathartic, was the only medicine I found neceſſary.

Quere.—In what way could the hair have originated? or is it an improbable conjecture that in the firſt formation of the eye-brow, part of it had been inverted? I apprehend there can be no doubt of the tumor being formed by the inflammation thoſe hairs had excited.

Horsham, Suſſex,
May 4, 1801.

I am, &c.
J. SHEARSMITH, Surgeon.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

I Have taken the liberty of communicating to you a caſe of diſlocated ſhoulder, ſuch as, I believe, very ſeldom happens; if you think it merits a place in your uſeful Publication, you will oblige me by inſerting it. I am, &c.

Ketley, April 18, 1801.

J. EVANS.

January 9, 1801, Wm. Whittingham, a labouring man, 64 years of age, applied to me with his left ſhoulder apparently much bruiſed, in conſequence of a fall he had met with a few days before. The man was in liquor when the accident happened, ſo that he could give me no ſatisfactory account in what

position his arm was in at the time he received the injury. On examination, I found the whole shoulder so much swelled that I could not feel either the head of the os humeri or the extremity of the scapula; and, as the arm could be brought close to the side without difficulty or pain, I of course concluded there was no dislocation; therefore directed the shoulder to be well rubbed twice a day with a volatile embrocation, and a stale beer poultice to be applied till the tumefaction subsided.

In nine days after (about a fortnight from the time of the accident) he came to me again, with his arm and hand much swelled, but the shoulder greatly reduced in size, complaining of considerable pain in that part of the arm where the deltoid muscle is inserted into the os humeri.

I had now a fair opportunity of examining the true state of the shoulder, which, to my great surprise, I discovered to be completely dislocated *backwards*; the head of the os humeri lying evidently *upon* the scapula. In the afternoon of the day he applied to me, I, with proper assistance, attempted the reduction by making a gradual extension with the fore-arm bent, (the method I have adopted with success for many years, when the head of the bone lay in the axilla, or under the pectoral muscle); notwithstanding repeated trials I gained no advantage. Thus foiled in my efforts, and the patient being a good deal fatigued, I postponed any farther attempts until the following morning. In the interim, I recollected Mr. White's (of Manchester) method of reducing dislocated shoulders of several month's standing,* which determined me to adopt the same mode of practice, especially as my patient's case corresponded much with that of James Dawson's, mentioned in page 100 of Mr. White's book, excepting that the head of the os humeri was forced *upon* the scapula, and not *under* it, as related by Mr. White.

The man being placed in a sitting posture on the floor, was kept firmly in that situation by an assistant. Two strong persons stood upon a table, and endeavoured to raise the patient by his dislocated arm, while I attempted to guide the head of the bone into the socket, but all our exertions proved ineffectual; which I attributed, in some degree, to want of sufficient power, and also to the opposition the biceps muscle (being on the stretch) might probably give us. I therefore procured a set of brass pullies, usually employed for raising of timber and other heavy materials, and fastened them to a strong hook which was fixed in a beam at the top of the room. I then defended the man's arm above the elbow with a thick cotton handkerchief wrapped

* See Cases in Surgery, page 95.

wrapped ſeveral times around it, over which was applied a ſtrong towel, ſecured firmly to a cord that paſſed over the pullies. One of the aſſiſtants made a gradual and powerful extenſion by pulling at the chord, the other * kept the fore-arm bent, with the elbow in an oblique direction backwards, while I, at the ſame time, with one hand preſſed down the ſcapula, and with the other endeavoured to diſlodge the head of the bone. In the ſpace of a few ſeconds I had the ſatisfaction of feeling it give way, and hearing it crack as it went into its place. Upon which the patient with great extacy cried out, "It was in." He was then ſet at liberty; and, on examination, I found he was perfectly right in his aſſertion. He became immediately eaſier, and by carrying his arm in a ſling for a few days the ſwelling gradually ſubſided. At the end of a fortnight he was able to return to his uſual employ.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

AS the Medical School of Edinburgh has now attained a degree of celebrity ſcarcely equalled, and certainly not ſurpaſſed, by any ſimilar ſeminary in Europe, ſome account of thoſe meritorious individuals, whoſe genius and induſtry have been ſo ſucceſsful in diffuſing ſo extenſively its well-earned fame, may not be regarded as unworthy of a place in your very reſpectable Journal; I ſhall therefore, if you pleaſe, occaſionally ſend you ſome biographical notices of ſome of the Founders of the medical department of this Univerſity, with ſome curſory remarks on their diſcoveries and works.

The firſt founder of the Medical School of this city was certainly the late excellent Dr. Alexander Monro, a man whoſe great modeſty, humanity, indefatigable induſtry, and high profeſſional talents, excited the love and admiration of his cotemporaries; and whoſe works exhibit ſuch profound reſearches, important diſcoveries, and great practical utility, as muſt endear his memory to the preſent and to every future generation.

Dr. Alexander Monro was born in London, on the 8th of September, O. S. 1697. His father, Mr. John Monro, was

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* Mr. Beeſton, Surgeon, of Wellington, who was ſo obliging as to aſſiſt on this occaſion.

an eminent ſurgeon, and ſerved in the army in that capacity. Soon after the birth of his ſon he retired from the army, and fixed the ſcene of his reſidence in Edinburgh, where his profeſſional ſkill, his active induſtry, and his conciliating deportment, ſoon eſtabliſhed him in extenſive practice. But although much occupied in the line of his profeſſion, he devoted a great ſhare of his attention to the education of his ſon, whoſe dawning genius he ſoon obſerved, and with pleaſure ſuperintended. At this period Edinburgh afforded few opportunities for medical improvement, and Mr. Monro, who was well acquainted with this defect, and anxious to remove it, fondly hoped that that ſpirit of diligence and inveſtigation, which actuated his ſon even from his infancy, if judiciouſly directed, and furniſhed with the proper means of improvement, might in time capacitate him to impart that knowledge which was then ſo great a deſideratum.

Young Monro, diſtinguiſhed by active genius, and by great induſtry, ſoon acquired every branch of literature at that time taught in the Univerſity of Edinburgh; and having early reſolved upon the profeſſion of medicine, we may ſuppoſe him to have been initiated in the preliminaries of that ſcience, under the tuition of his father, a man well qualified to direct him, and deeply intereſted in his ſucceſs. Farther, however, in the career of improvement he could not then advance; for, at this period, no traces of a Medical School had exiſted; there were indeed nominal profeſſors, but there were neither ſtudents nor public prelections. Young Monro, of courſe, found it neceſſary to ſelect ſome other field for proſecuting his enquiries; accordingly, an extenſive plan of education, firſt in London, afterwards in Paris and in Leyden, was judiciouſly deviſed and ſucceſsfully carried into execution. During his reſidence in theſe places, Monro's diligence in availing himſelf of every opportunity for improvement which his ſituation offered, was indefatigable. To the moſt eminent teachers of the times he repaired for inſtruction; and among thoſe whoſe public prelections he attended, it will be ſufficient to mention the names of a Cheſelden, of a Hawkſby, Chomel, Bouquet, Thibaut, and the immortal Boerhaave. With Boerhaave he lived in habits of ſtrict intimacy, and, on leaving Leyden, this truly great man amply atteſted his profeſſional ſkill, and his penetrating genius.

Monro did not reſt ſatisfied with the knowledge derived from his attendance on theſe celebrated profeſſors; eagerly deſirous to excel in the profeſſion which he embraced, he explored every collateral channel through which real knowledge could be obtained. He every where courted the intimacy of men conſpicuous for profeſſional ſkill, or for literary attainments,

ments, and he associated with those who had been prosecuting the same enquiries with himself. In a society of this kind at London, he read an Essay on the Bones in general, which constituted the ground work of a future publication on that subject, a Treatise which alone is sufficient to confer immortality on its author, and which, in point of practical utility and accuracy of description, stands as yet unrivalled among works on Osteology. Of his activity and skill as a practical anatomist, he at this time exhibited some elegant specimens in preparations of different parts of the human body, which were presented by his father to the Royal Colleges of Physicians and Surgeons, and so well received by them, that a Mr. Drummond, who was then nominal Professor of Anatomy, assured him, that if the future progress of his son corresponded with these fruits of his industry, he would on his return to Scotland resign the anatomical chair in his favour, and by devolving his charge upon so promising a successor, convert his nominal dignity into an useful profession.

Having in consequence of Mr. Drummond's resolution, the prospect of soon filling the anatomical chair, there can be no doubt that this corner-stone of medical science was paramount in Monro's mind to every other subject of enquiry; but to his cotemporaries his practice, and to us his writings, exhibit satisfactory proofs of his attention to every other branch of medicine, and while they maintain his title to the character of an accomplished anatomist, substantiate his claim to the reputation of an able physician.

Qualified in this manner for the duties of a practitioner, and for the office of a teacher, Dr. Monro returned to Edinburgh. In that place fame had reported his acquirements previous to his arrival, he was not of course permitted to remain long inactive. He had not resided there many months, when, in the year 1720, he was called upon to give the first Course of Lectures on Anatomy and Surgery which was ever delivered in that city. For the execution of this arduous task he brought great zeal and consummate talents, he could of course hardly fail in giving ample satisfaction; his success indeed corresponded with the expectations of his warmest admirers. The accuracy of his demonstrations, and the ingenuity of his physiological remarks, were equally conspicuous; while the constant application of his subject to the practice of physic and surgery, rendered his prelections peculiarly valuable.

It is not detracting from the abilities of this eminent professor to assert their inadequacy to diffuse the fame of a school which had to cope with so many rival seminaries of deserved eminence, without some coadjutors to second and to support his exertions,

exertions. Senſible of this fact, his father, whoſe zeal for the eſtabliſhment of a Medical School here had acquired ſtrength proportionate to the probability of ſucceſs, prevailed on Dr. Alſton, the then King's Botaniſt for Scotland, to give a courſe of lectures on the Materia Medica. Dr. Alſton was a reſpectable aſſociate; but other branches of medicine ſtill remained to be illuſtrated. Monro, therefore, exerted his powers of perſuaſion to kindle in others that enthuſiaſm for enlarging the boundaries of medical ſcience with which he himſelf was animated. But a ſhort period elapſed when his endeavours in this reſpect were crowned with ſucceſs, and the young profeſſor ſoon found himſelf aſſociated with colleagues whoſe talents gratified his moſt ardent wiſhes; with a Rutherford, a Sinclair, a Plummer, and an Innes, names which will be long remembered, and are deſervedly conſpicuous in the annals of medicine.

Countenanced by the labours of theſe eminent men, and of their immediate ſucceſſors, Dr. Monro, with unremitting diligence, conſecrated his time and his talents to the improvement of medical ſcience for the period of half a century. During this long lapſe of years, he muſt have received the increaſing fame of a ſeminary of education with a delight which reſulted from a conſciouſneſs of its being, in a great meaſure, indebted to himſelf for its exiſtence; and before the termination of his diſtinguiſhed career, he found it inferior to none, and equalled by few, of the Medical Schools in Europe. Such was the conſpicuous reward of that aſpiring genius, who had given birth to the medical ſeminary, which before he withdrew from the public ſtage of life almoſt arrived at the acmé of its celebrity.

We deem it not improper here briefly to ſketch the arrangement which he obſerved in his annual courſe of lectures on Anatomy and Surgery, which, with the greateſt aſſiduity, and without the leaſt interruption, he delivered to a crouded and an admiring audience for the period of forty years. This courſe laſted upwards of ſix months, and ſo great was the reputation he acquired as a teacher, that ſtudents flocked to him, not only from the moſt diſtant parts of the Britiſh dominions, but alſo from foreign nations.

He introduced his courſe with an hiſtorical ſketch of the progreſs of Anatomy from the earlieſt ages. In delivering this intereſting abſtract, the ſtrength of his memory, and his facility of expreſſion, were peculiarly conſpicuous. There are thoſe living who ſtill remember with what eaſe and fluency he gave a regular account of the moſt diſtinguiſhed Anatomiſts, from the earlieſt periods to the preſent times, mentioning the different improvements and diſcoveries, the exact periods at which

which every diſcovery was made, and the claims of different authors to the honours of particular diſcoveries.

2. Next followed his lectures on Oſteology. After a luminous and full diſcuſſion of the ſtructure, uſe, and diſeaſes of the bones in general, he entered upon the conſideration of each in particular, demonſtrating it to his pupils both ſingly and in the ſkeleton; and after ſhewing its particular parts and ſtructure, he treated of its uſes, of the diſeaſes and accidents to which it is ſubject.

3. He demonſtrated all the muſcles of an adult ſubject, with the viſcera of all the different cavities of the human body, and ſhewed the nerves and blood-veſſels in the bodies of children. After demonſtrating each organ, he always treated of its phyſiology and pathology, illuſtrating the diſeaſes to which it is liable, and enumerating the moſt approved remedies. In this diviſion of his courſe he alſo exhibited preparations of the different parts, as he treated of them.

4. After finiſhing the anatomical demonſtrations of the human body, he endeavoured to illuſtrate ſtill farther this intereſting ſubject, and to throw ſome more light on the animal œconomy, by the diſſection of different animals, quadrupeds, fowls, and fiſhes, and by comparing the ſtructure and uſe of their organs, with the correſponding organs in man.

5. He conſidered particularly the diſeaſes for the removal of which chirurgical operations are commonly neceſſary, and the beſt methods of treating them. He then ſhewed to his pupils the different operations of ſurgery performed on the dead ſubject, and mentioned the various methods which had been propoſed for performing theſe operations, with the advantages and diſadvantages attending each.

6. After the operations of ſurgery, he ſhewed the different bandages and machines uſed by ſurgeons, with the mode of their application, and mentioned the caſes in which they were uſeful.

7. He cloſed his long and laborious winter courſe with ſome general lectures on the phyſiology of the human frame.

We have thus briefly adverted to the plan which the celebrated Monro adopted in his Lectures, becauſe it exhibits a conſpicuous proof of his great judgment, of his extenſive and various information; and becauſe it may ſafely be propoſed as a model for the imitation of other anatomical demonſtrators.

Hitherto we have contemplated this eminent man, chiefly in his profeſſional capacity; but to regard him in this light alone would be but exhibiting a partial view of his character and conduct. In the labours connected with his department in the Univerſity, his diligence and anxiety to excel were indeed exemplary;

emplary; but he was no leſs aſſiduous in adding to the ſtock of his own knowledge, and in the improvement of medicine in its various branches, both as a ſcience and as an art. He had long and ſeriouſly reflected on the manifold advantages which would accrue to ſtudents in medicine, to the country at large, and indeed to ſociety in general, from the eſtabliſhment of an hoſpital in the city of Edinburgh. To impart immediate relief to the unfortunate whom the accumulated load of diſeaſe and of poverty cruſh to the ground; to illuſtrate the healing art both by experiment and by example; to impart uſeful inſtruction not only to the ſtudent but alſo to the practitioner, and even to remove ſome of thoſe difficulties which impede the progreſs of medicine itſelf, were the invaluable conſequences in which it was reaſonably expected ſuch an eſtabliſhment would reſult.

The mind of this benevolent man was impreſſed with this view of the ſubject; and in order to accompliſh the great work, he had recourſe to every expedient which an active genius, moved by compaſſion for the miſeries of his race, and intereſted in every feaſible plan for their mitigation, could ſuggeſt. He wrote a pamphlet relative to the advantages which would accrue to the community from ſuch an inſtitution, and the impreſſion it produced on the public was ſuch as to intereſt every denomination of people in the undertaking, from the firmeſt conviction of its being calculated, not only to accommodate the poor and the needy, but to advance the public good. Thus was the Hoſpital erected by the joint co-operation, not only of thoſe whom heaven had bleſſed with enlarged views and with feeling hearts, but even of others, whom the partiality of fortune had placed in affluent circumſtances, and whom, although but ſlightly impreſſed with the deſire of alleviating the miſeries of their poor brethren, the peruſal of Dr. Monro's pamphlet had convinced of the utility of ſuch an eſtabliſhment.

The limits of this paper will not allow us to deſcant upon the character of any other individual, who gave an active countenance to Monro, in realiſing this great national charity, elſe honourable mention might and indeed ought to be made of many benevolent characters, and more eſpecially of the late George Drummond, Eſq. who had often occupied the chair of chief magiſtrate of the city of Edinburgh, with no leſs credit to himſelf than advantage to the public, and for whoſe liberal principles, and inceſſant endeavours for the eſtabliſhment of the Royal Infirmary, his memory will be long held in ſacred remembrance by a grateful poſterity. The taſk of deſigning, ſuperintending, and executing every part of this great work, was devolved by the firſt contributors upon this active magiſtrate,

giſtrate and upon Dr. Monro, under the deſignation of the building committee; and by the joint exertions of theſe two meritorious individuals, an hoſpital, large, elegant, and commodious, was ſoon provided with every accommodation for its poor, diſeaſed, and deſtitute inmates. To their mutual labours therefore this country is indebted for all the benefits derived from the Royal Infirmary of Edinburgh.

In theſe active exertions Dr. Monro looked forward to the many benevolent purpoſes which a public hoſpital would ſubſerve, but his attention was chiefly engroſſed by the advantages which would accrue from it as a field for medical education; and to the attainment of this great object, he devoted an active ſhare of his labours to the lateſt period of his life. When burdened with thoſe infirmities which labour and age had faſtened upon him, he retired from his claſs, and conſigned to his ſon the charge of the Anatomical Theatre, he was ſtill aſſiduous in his attendance in the Hoſpital, and continued to give Clinical lectures, with great ſkill and with indefatigable induſtry. In the treatment of his patients his practice was rational; and his remarks on the caſes which came under his view, indicated the acuteneſs of his intellect, and the ſolidity of his judgment. Even when baffled in the efforts of his medical ſkill, diſſection furniſhed him with an opportunity of imparting many uſeful leſſons to his pupils. The knowledge of the cauſes of diſeaſe, by diſſection, was an object which occupied much of his attention, and in the inveſtigation of which he embraced every opportunity which his different ſituations as phyſician, lecturer, and manager of the hoſpital afforded him. At the inſpection of his dead patients he was always preſent; and not only dictated an accurate report of the diſſection, but, with a nice diſcrimination, contraſted the diſeaſed and the ſound ſtate of the organ.

From his official capacity as an Anatomical Demonſtrator, and a Clinical Profeſſor, he had many opportunities for experiments, both on the living and on the dead ſubject; from theſe opportunities he was eminently calculated to derive every poſſible advantage, and the fruits of his labours he conſecrated to the improvement of his favourite ſcience.

We have thus delineated Dr. Monro's character as a Profeſſor, a Phyſician, and as a Founder of our National Hoſpital. That ardent and upright temper of mind which diſtinguiſhed him in theſe public functions, marked his conduct in every other department of life. His practice as a medical man was very extenſive. He was a member of many learned ſocieties, and ſuperintended the management of many public charities. Theſe engagements, however extenſive and multifarious, did

not preclude him from attending to other public concerns, both of a civil and of a political nature. In ſhort, the purſuits in which this great man was engaged, perhaps exceeded, in point of variety and importance, the avocations of any of his cotemporaries; yet did he diſcharge the duties relative to them all, with the ſtricteſt integrity and with the moſt rigid punctuality.

This eminent perſon was at laſt attacked by a moſt painful and lingering diſtemper, the torments of which he endured with a pious reſignation and with a ſteady fortitude. To this mortal diſeaſe, whoſe progreſs could not be arreſted by the utmoſt efforts of medical ſkill, or of human aſſiſtance, after many months ſufferings he fell a victim, and cloſed his moſt active and uſeful career on the 10th of July, 1767, in the 70th year of his age. — We ſhall now cloſe this ſuperficial ſketch of his life with a brief notice of his diſcoveries and works.

A circumſtantial review of this learned Profeſſor's numerous diſcoveries and valuable improvements, both in the ſcientific and practical departments of the healing art, would lead us longer into detail than is conſiſtent with this brief memorial. We have ſeen in what degree of eſtimation he was held by his cotemporaries, and poſterity will recognize his ſuperlative merits in his writings, when every biographical notice regarding him ſhall have periſhed in the ſtream of oblivion. Of every ſociety in Edinburgh, inſtituted either for the improvement of the arts, or for the diffuſion of the ſciences, he was juſtly regarded one of its ableſt ſupporters, and of its brighteſt ornaments. He was a member of the Colleges of Surgeons and Phyſicians; of the Medical and Philoſophical Societies; of a ſelect Society conſtituted for the purpoſe of diſcuſſing moral and political queſtions, and of the Society for promoting Arts, Sciences, and Manufactures in Scotland. In the diſcuſſions of all theſe various bodies he engaged with an active and an uniform ardour, and his zeal correſponded with his pre-eminent talents. Thus deſervedly eſteemed and reſpected at home, he was equally revered and honoured abroad. Of the Royal Society of London he was a non-reſident member; and the Royal College of Phyſicians at Paris enrolled his name in the catalogue of its foreign aſſociates. — Let us now take a curſory view of his writings.

His Treatiſe on Oſteology was originally deſigned to facilitate the progreſs of ſtudents in this fundamental branch of anatomical knowledge, but it merits attention from the greateſt adept in the ſcience; and from its peruſal the moſt experienced practitioner may derive uſeful information. Every perſon who is acquainted with this invaluable treatiſe, muſt indeed regard it as a monument of its author's abilities, exhibiting at once

once the moſt luminous proofs of extenſive reading, accurate information, and judicious reflection. The deſcription of the bones is minute, exact, and accordant with nature; the ſentiments of other authors are faithfully narrated, and candidly appreciated; and the work every where abounds with new and important obſervations, which have an immediate reference to practice. This great work met with the deſerved reception.—Eight large impreſſions were ſold during the author's life-time. It has been tranſlated into moſt European languages; and the French edition, in folio, publiſhed by the celebrated Monſieur Sue, Demonſtrator to the Royal Academy of Sculpture and Painting at Paris, is one of the moſt ſuperb books in print, and adorned with as elegant and maſterly engravings as are to be found in any anatomical work.

To the latter editions of his Treatiſe on the Bones, he added a Neurology, or Anatomy of the Nerves, in which he gives a conciſe and accurate deſcription of the larger branches of theſe conveyers of ſenſe and motion. As this work was alſo written for the improvement of his pupils, he has not delineated the minuteſt branches, being afraid that his going into ſuch particular details might embarraſs the minds of the young enquirers, rather than impart inſtruction. In this treatiſe he has alſo mentioned moſt of the prevailing opinions concerning their ſtructure and uſe; and although ſucceeding anatomiſts have called in queſtion his ſpeculations relative to the texture and phyſiology of theſe important organs, it muſt be confeſſed that the arguments adduced in ſupport of his opinions are equally ſpecious and ingenious. To this treatiſe he has alſo ſubjoined an account of the receptacle of the chyle, and of the thoracic duct, organs of eſſential importance in the animal œconomy, which, in point of accuracy, has not been ſurpaſſed by any ſucceeding author.

We are now to conſider him as a contributor to, and the editor of, another and more extenſive medical work. In the year 1731, the profeſſors of medicine, and other phyſicians and ſurgeons in the city of Edinburgh, conſtituted themſelves into a ſociety for collecting and publiſhing ſuch medical obſervations and eſſays as the members themſelves could bring forward, or as might be communicated to them by friends and correſpondents. To this ſociety Dr. Monro acted in the capacity of ſecretary. At the beginning of the inſtitution the members punctually attended, and remarked upon the papers ſubmitted to their inſpection: but after the publication of the firſt volume, they grew remiſs in the diſcharge of their duty, and not long thereafter, the whole labour both of collecting and publiſhing their tranſactions was devolved upon the ſecretary. Of the papers of this collection

Doctor Monro furniſhed many more than his ſtrict quota; and in theſe excellent eſſays he has added materially to our knowledge, both of the ſtructure and phyſiology of ſeveral parts of the human body. His anatomical knowledge ſuggeſted to him many uſeful and practical inferences, and he propoſed many new improvements in the mode of performing many capital operations, the greater part of which have been adopted by our moſt eminent ſurgeons. To Doctor Monro, therefore, are we chiefly indebted for the ſix volumes of Medical Eſſays and Obſervations, a work which has been ſingularly approved of by the moſt competent judges, undergone various editions in the Engliſh language, and has, moreover, been tranſlated into many foreign languages. The very univerſal reception with which this work has been deſervedly honoured, ſuperſedes the neceſſity of our approbation: ſuffice it to notice, that honourable mention is made of it by the immortal Haller, who appreciated its intrinſic merit ſo highly as to declare, that it ought to find a place in the library of every medical practitioner *; and indeed it muſt be confeſſed, that it has enriched every department of medical ſcience with numerous and important diſcoveries. The plan of this ſociety was afterwards enlarged by the admiſſion of ſeveral other gentlemen, eminent for literary and philoſophical talents, and by this arrangement, its tranſactions became philoſophical as well as medical. When this ſociety was thus new modelled, Dr. Monro was elected one of its preſidents. Their papers were publiſhed under the deſignation of Literary and Phyſical Eſſays; and in the two firſt volumes are to be found ſeveral papers from the Doctor's pen, which indicate the ſtill exuberant treaſures of his mind, and adorn the pages of that valuable collection.

His account of the ſucceſs of inoculation in Scotland cloſed his career as an author. This paper was originally written in anſwer to an application from the delegates, upon whom the faculty of phyſicians at Paris had devolved the taſk of appreciating the merits of this practice. It exhibits a ſtriking proof of his extenſive correſpondence, and of his indefatigable induſtry. It had a conſiderable effect in removing prejudices, which at that period were general and ſtubborn, and in reconciling both practitioners and parents to a ſimple ſalutary operation, that has been the means of preſerving the lives of thouſands, by diſarming, in a great meaſure, a malignant diſtemper of its deadly virulence.

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* Quinque volumina Speciminum Societatis Edinburgenſis prodierunt (quorum ultimum duplex eſt) Medicis perutilia, et Chirurgis, et Anatomicis. Monrous ibi eminet. Haller, Meth. Stud. Med. p. 69.

Some

Some of his posthumous works which have appeared are distinguished by that elegance and simplicity of expression, and by that extent of information which characterize his other masterly productions. In his Oratio de Cuticula Humana, many curious circumstances are described, which escaped the observation of former anatomists, particularly the appearance of the fibres which connect the cuticula with the *cutis vera*. In the Essay on Comparative Anatomy, originally composed from notes taken down from his lectures, but found in a more correct form among his papers, and published since his death in the quarto edition of his work, he certainly evinces himself a great master. It cannot, indeed, be regarded as a complete work; but the plan is judicious, and the proper tract for inquiry pointed out, which might be easily prosecuted. The descriptions are taken from the life, and the reasoning is interesting, perspicuous, and conclusive. As in the other works of the author, so in this treatise we find many practical observations on surgery and medicine interspersed, which must equally instruct and entertain the reader.

Besides these two posthumous publications, it is understood he left several other manuscripts, which have not as yet seen the light. We have heard of a History of Anatomical Writers.—An Encheiresis Anatomica—Heads of Lectures—A Treatise on Wounds and Tumours—Observations on some parts of Heister's Surgery. These papers have not been inserted in the posthumous edition of his works, although there can be little doubt of their possessing intrinsic merit; and the deserved celebrity of the author would have certainly secured them a favourable reception.

We have thus briefly reviewed the life and writings of the late Doctor Alexander Monro, and it may, perhaps, be expected from us to close the narrative with a delineation of the prominent features of his character. The lineaments of his mind have, in some measure, been traced in the course of our narration, and to exhibit the aggregate of his qualifications within the limits which must be prescribed to this essay, would be impossible; we shall therefore rest satisfied with observing, what indeed has already appeared in his history,—that the zeal and industry displayed by him in the prosecution of knowledge have seldom been equalled, perhaps never surpassed; that he taught his favourite science with an enthusiasm and a liberality of sentiment proportioned to its vast importance; that he was conspicuous for active philanthropy and mildness of temper; that he was steady in his friendships and frank in his intercourse, a dutiful son, an affectionate father, and an excellent husband; that he was always forward to patronize modest neglected merit, and to relieve the exigencies of indigent genius. It is not contended, that in the

line

line of his profeſſion Doctor Monro has ſuperſeded the neceſſity of future induſtry, but it is maintained that he has accompliſhed more than the ſhort ſpan of human life could well authorize us to expect from the exertions of any ſingle individual; and that in the various ſtations of a Student, a Teacher, and a Practitioner in Medicine, he has exhibited a bright pattern for the imitation of poſterity.

Edinburgh, 9th April, 1801. D. I.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IF the following caſe of an incipient mortification of the fingers, from immerſing the hand in cold water, together with the plan of treatment adopted, be thought of ſufficient importance to occupy a page or two of your uſeful Journal, you will add to the obligations already conferred by your polite attention to ſome former communications, in permitting it to appear in your next.

I am, &c.

Piccadilly, May 6, 1801. H. DAVIES.

A woman about forty years of age, of a thin, ſpare habit of body, in conſequence of immerſing her hands in cold water, on the next day felt an unuſual pain in the arm, from the hand up to the elbow. An inflammation enſued, which very ſoon put on a dark, livid appearance, attended with a conſiderable increaſe of pain, on the following day, which laſted for three hours together without any interval of eaſe. This continued for three days before ſhe conſulted me on the caſe. On the fourth day I was called to attend her, when I found the fingers and thumb exhibiting a mortified appearance. The ſenſibility and mobility of the parts were nearly deſtroyed; the pulſe weak, attended by a general debility of the whole ſyſtem, which cauſed ſome apprehenſion leſt a complete gangrene of the parts affected might conſtitute the unhappy termination.

Under theſe circumſtances, I thought the indication was plain and ſimple; that is, to reſtore, as much as poſſible, energy to the ſyſtem in general, vitality to the affected parts in particular, and, likewiſe, to diminiſh the morbid irritability neceſſarily attendant

tendant on such cases; consequently, I exhibited the cinchona in its concentrated form as I could, and to be taken in as full a dose, and as often as the stomach could bear, with the addition of tinct. opii, together with an anodyne at night. The parts were ordered to be fomented often in the day with equal parts of brandy and vinegar, and then covered with linen rags, wetted with camphorated spirits. A generous diet was enjoined, and a liberal use of wine enforced. I was happy to find, on the adoption of this plan, some promising appearances of amendment on the next day. Sensibility, in some measure, was restored to the parts, and the discoloured skin assumed a more pleasing aspect. Persisting in the same plan, appearances every day became more favourable. The pain through the whole substance of the arm gradually diminished, and the whole system, before enervated, daily increased in vigour.

From such appearances little doubt was to be entertained respecting the issue of a case, which, without such timely applications, portended the most serious consequences. Not that I would be understood to claim the merit of the discovery of any new remedy employed in the treatment of it, but it is rather written in confirmation of one already well known and understood, even bark and opium, the efficacy of which, in counteracting gangrenous tendency, has been repeatedly and advantageously experienced.

The late Mr. Pott, in treating of a mortification of the toes and feet, observed, that "Among the many cases in which the virtues of the Peruvian bark are particularly and justly celebrated, must be reckoned the distempers called gangrene and mortification. Its general efficacy in stopping one and resisting the other, have made no inconsiderable addition to the success of chirurgic art." And, as it acquires no inconsiderable improvement by its junction with opium, in cases of that description, it cannot, perhaps, be too early employed or freely exhibited in the curative plan of treatment.

If this short narrative of the successful termination of an unpromising case, serves to direct the practice of the less experienced in the profession, or tends to establish the reputation of an approved remedy in the hands of the judicious, so as in any degree to promote the interest of the healing art, the writer will be amply recompensed for the little time he has bestowed in collecting the few particulars together.

To

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IF the following fact, from its infrequency, or from any trifling additional light it may throw upon the theory of variolous contagion, may be deemed worthy a place in your valuable Journal, it is entirely at your diſpoſal.

About mid-day on Tueſday, the 7th ult. Elizabeth Berry, of this city, being at her full time, was ſeized with pain in the head and back, great thirſt and heat, which by the good women where ſhe reſided, were ſuppoſed to be the harbingers of approaching labour. On the following day they informed me of theſe circumſtances, and alſo that ſhe had never had the ſmall-pox, and that it had lately been at the next door. When I conſidered that the heat and thirſt were not conſequent upon, but coeval with the pain in the back, I ſtrongly ſuſpected that it would turn out the eruptive fever of that diſeaſe. I intimated my ſuſpicions to the attending women, and begged they would carefully watch the appearance of any eruption. In the night I was called up to her; and about five o'clock in the morning, (April 9th) ſhe was delivered of a boy. I called upon her in the courſe of the day; but although ſhe continued very hot, no eruption had appeared: towards the evening, however, her nurſe obſerved about half a dozen pimples upon her face, and the next morning, when I ſaw her, many had appeared, which gradually thickened and became confluent. On the Monday morning following, (being only four complete days after labour), I was deſired to look at the child, as he had been for ſome hours apparently unwell, and had puked conſiderably. I found him hotter than uſual, and he moaned much. On the Wedneſday morning, being ſix days from his birth, I perceived a conſiderable variolous eruption, which gradually increaſed; and on the Tueſday following (April 21ſt) put a period to his exiſtence. The child ſucked on the day after his birth. The mother, I am happy to ſay, recovered.

It may not here be improper to obſerve, that I have fixed the dates of the ſymptoms and appearances as they came under my own eye; although, probably, they took place ſeveral hours previous, as the women ſay they thought the child was unwell on the Sunday evening, and on the Tueſday evening they ſaw a few little ſpots, which they took for the red-gum, but which, from the number of variolous eruptions I ſaw on the following morning, there is good reaſon to believe were the ſmall-pox.

Did

Did this child receive the infection before or after birth?

It has been generally admitted that the casual small-pox rarely produces its constitutional symptoms till ten or twelve days after infection; and Dr. Haygarth, who has paid the most minute and unremitting attention to every thing connected with variolous contagion, seems to place eight days as the shortest period that elapses between infection and eruptive fever. Most authors are also of opinion, that the small-pox is not contagious during the eruption. As this child, from my own observation, had decided marks of eruptive fever, when only four days old, and eruptions when only six, and these events (as before observed) had taken place several hours previous, it appears clear, if he received the infection after birth, that the above-mentioned positions cannot, in all cases, be well founded: but when I consider the high and numerous authorities that support these doctrines, my mind seems satisfied that he took the disease before that period. It required no additional facts to prove, that the fœtus could receive the variolous infection in utero; there are so many on record, that the hardiest sceptic can no longer foster a doubt upon the subject, but I have not been able to discover one that could throw much light on the stage at which the mother conveyed it to the fœtus, whether before the eruptive fever, during the eruption, or after it. If Dr. Haygarth's statements are founded in truth, this fact will at least prove that it may be conveyed even previous to the eruptive fever, as that fever took place in the child only six days from its first appearance in the mother, and eight days are allowed by Dr. H. and other able writers, to be the shortest period that passes between infection and constitutional symptoms.

Two facts related by Dr. Waterhouse, go far to prove that the disease may be communicated through the medium of the blood, sooner than in any other way. He instances two ladies, who took the small-pox from the effluvia of the blood of another lady, who was bled during the eruptive fever, it not being known at the time that she had that disease; the one lady held the bason, the other had it handed to her to put down. When we consider that the best anatomists are of opinion that the chief use of the placenta is as a breathing organ for the fœtus, there seems a material analogy between these parts which mutually support and illustrate each other. If breathing for a few moments the effluvia of the blood, during the eruptive fever, can convey the small-pox, it requires no great stretch of faith to believe, that by that continual respiration (if I may use the expression) which is going on between the mother and fœtus, it may be conveyed before that period.

I am, &c.

Worcester, 14th May, 1801. C. H. HEBB.

Account of some Cases of the Plague, which occurred on board of a British Ship of War, on the Coast of Syria. Communicated by Dr. BLANE.

IN the ſpring and ſummer of 1799, the plague prevailed in Syria, and was communicated to ſome of the Britiſh ſhips of war employed on that coaſt, particularly at the celebrated ſiege of St. Jean D'Acre. An account of ſome of theſe caſes was ſent by Mr. Tainſh, ſurgeon of the Theſeus, a ſeventy-four gun ſhip, to the Commiſſioners of ſick and wounded Seamen; and as there ſeems to be no doubt that theſe were caſes of the true plague, from the deſcription, as well as from the exiſtence of it on the ſpot at that time, as opportunities of obſerving it rarely occur to practitioners of this country, and as it was ſucceſsfully treated by powerful medicines, theſe caſes ſeem deſerving of being communicated to the public, particularly at this moment, when the defenders of our country are expoſed to that dreadful malady in Egypt.

The greater part of the ſymptoms enumerated are ſuch as might occur in a violent fever; but the buboes which were obſerved in the axilla in three caſes, and in the groin in two caſes, out of the five which occurred, ſerved, in conjunction with the other ſymptoms, to characterize and aſcertain the diſeaſe. The moſt remarkable ſymptoms beſides theſe were violent vomiting, *petechiæ*, ſwelled tongue, redneſs of the eyes, ſevere head-ach, and great debility; rigors, foul tongue, and the other concomitants of fever alſo attended it. But it will be more ſatisfactory to give the moſt intereſting and inſtructive parts of Mr. Tainſh's narrative in his own words.

"The firſt caſe was that of Colonel Philipeaux, a French officer, acting under the orders of Sir Sydney Smith, at the ſiege of Acre. He was always fearful of the plague, and dreaded much the touch of any Turk, which kept his mind in a ſtate of continual anxiety. When ſeized with the diſeaſe he would take no medical advice, but drank copiouſly of lemonade. He died the fourth day of his illneſs by a hæmorrhage from the bowels, with other ſymptoms of a moſt ſevere fever. His bed and bedding were thrown overboard with him, and every precaution was taken to fumigate and cleanſe the captain's cabin where he died.

"No other caſe occurred till we took ſeveral French boats off Jaffa, with wounded and ſick men, after their departure from the ſiege of Acre. Thoſe apparently in health, particularly the ſeamen, were ordered on board the Theſeus, and one of

of them was seized with the symptoms above described, which in twenty-four hours were followed by buboes and extreme debility. Having at that time no sick, I removed him to the sick birth, ordered every part of his clothes off, and himself to be washed from head to foot with soap and warm water, after which his head, arm-pits, and pubis were shaved. He was furnished with a clean bed, linen, and night-cap, and all his former clothing was thrown overboard. I then gave him an emetic, consisting of half a drachm of ipecacuanha, and a grain and a half of tartar emetic; which not having operated freely, it was repeated in three hours, and he discharged an enormous quantity of bile, viscid sordes, and tough phlegm. I next gave him ten grains of calomel and six grains of antimonial powder, and repeated them in four hours; he had, at the same time, a laxative clyster, which procured him several stools that seemed to give him much relief. He rested pretty well, and having some fever next day the antimonial was continued. Towards the evening he had an exacerbation, attended with delirium, which left him after the application of a blister to the head. He now complained of a bitter taste and nausea, with great prostration of strength. I gave him a scruple of ipecacuanha and two grains of tartar emetic, which cleared the stomach of a large quantity of disagreeable matter, which gave him great ease. As he was now free from fever, I determined to give him the Peruvian bark, which was mixed with Port wine, and he took it with much pleasure, making signs for more. In an hour I let him drink half a pint of Port alone, which pleased him much; and after this he slept above three hours. On waking he was much refreshed. At bed-time I gave him six grains of camphor and two of opium, which procured him a good night, and next day he was greatly better. As he expressed much inclination for wine, I gave him some of the red wine with bark infused in it; but he preferred the wine by itself, which was very good, and by promising him plenty I prevailed on him to take the infusion alternately with it, regulating the quantity according to his sensations.

"The buboes continued stationary during the early part of the fever; but as soon as he began to take wine and nourishment, they assumed an inflammatory appearance, with excruciating pain. I ordered warm fomentations and emollient poultices, and he took an opiate at bed-time. As these poultices did not seem to assist maturation, I ordered others, consisting of soap, assafœtida, and onions chopped small, which had the desired effect in bringing them to suppuration. I opened them with the lancet; the matter was of a thin sanious nature. The poultice being continued, the glands in a cluster protruded

through the opening, without any ſuppuration having taken place in their ſubſtance. I cut them away, and dreſſed the ſore with an ointment compoſed of yellow baſilicon, mercury and turpentine, applying the emollient cataplaſm over all; and, in a few days, a good pus was produced. He gathered ſtrength daily, ſometimes drinking wine as far as two quarts, ſeldom leſs than three pints, in a day; he had alſo as good a diet as the ward-room table could afford. The cure was ſoon compleated, much to my ſatisfaction, and he returned ſome time after to France in perfect health.

" The third caſe was that of a ſeaman, who was ſent from the Theſeus on board of a gun-boat. Having communication with the French boats which we took, and having drank a large quantity of ſpirituous liquor, he was brought on board in a ſtate of low delirium, his tongue being ſwelled and protruded, his ſkin being dry, and his mouth parched; he had alſo a burning ſenſation over the whole body, with ſwellings in the arm-pits, *petechiæ*, and univerſal debility. I could not get him to ſwallow any thing, and he died in twenty-four hours.

" The fourth caſe was that of our ſhip's corporal, Matthew Garland, who had been on board a large boat lying along-ſide, to diſtribute wine and bread to ſome ſick and wounded Frenchmen; their wounds had not been dreſſed for three days; they were dreſſed in the boat, and ſupplied with more dreſſings. This man was ſeized with giddineſs and reeling, as if drunk, his eyes rolling, and his tongue ſwelled, protruded, and foul; he had alſo nauſea and retching, violent head-ach, ſhivering, and extreme debility. All his clothes and bedding were thrown over board, himſelf waſhed well with ſoap, warm water, and vinegar, and ſhaved, as mentioned in the ſecond caſe. An emetic was adminiſtered, and repeated three times in the courſe of twelve hours, which evacuated bile with a mixture of phlegm. At night, after the third emetic had operated, I gave him ten grs. of calomel and eight of antimonial powder, and next morning rhubarb with infuſion of ſenna, tamarinds, and cream of tartar, which produced vomiting and purging, after which ſucceeded a favourable change in all the ſymptoms, except in the bubo which was ſituated in the left groin, attended with great pain. I gave him bark, antimonials, wine, vitriolic æther with opium at bed-time, and treated the bubo as in the ſecond caſe. The wine, bark, æther, and opium were continued, particular attention was paid to the ſtate of the bowels, and with theſe remedies and a good diet he ſoon recovered.

" The fifth caſe was that of a Frenchman. After taking emetics, calomel, and rhubarb, which operated freely, he was ſent

ſent on ſhore to Alexandria, and I learned afterwards from a French officer that he recovered."

Mr. Tainſh obſerves at the concluſion of his letter, that the only precaution he ever took againſt infection was, previouſly to touching the perſon, to rub his hands ſlightly over with olive oil, and on leaving the ſick-birth, to waſh it off with warm vinegar, water and ſoap.

Though it is to be regretted that there are ſome points of importance, which have been omitted in the narrative of theſe caſes, ſuch as the interval between the time of receiving the infection and the appearance of the diſeaſe; the particular day of the diſeaſe on which certain ſymptoms aroſe, on which certain remedies were employed, and on which death took place; and though the treatment of the local complaint may appear to ſome not agreeable to the rules of correct ſurgery, yet there are other points ſo inſtructive and novel, as to render this communication very intereſting.

Though the caſes are not ſufficiently numerous to be conſidered as the grounds of an eſtabliſhed practice, yet it muſt be confeſſed that the method of cure was undertaken upon very rational principles, and founded on the analogy of the treatment of other diſeaſes. All febrile diſeaſes admit of ſpontaneous recovery; and a patient may, no doubt, occaſionally ſurvive, in ſpite of improper practice; but the means employed in theſe caſes were of ſo active a nature, that they could hardly have failed to have proved viſibly pernicious, had they not been adapted to the complaint. From the terror naturally excited by this diſeaſe, there is a great want of practical facts; and Mr. Tainſh having, much to his honour, attended theſe caſes with great deliberation and conſtancy of mind, his method of treatment ſeems highly deſerving of notice and imitation.

The methods of prevention that were uſed are no leſs deſerving of attention. The minute accuracy and great pains with which all adhering infection was deſtroyed, cannot be too much commended; and it is to be preſumed that the ſafety of the attendants and ſhip's company was owing to this.

Mr. Tainſh obſerves, that this diſeaſe is not ſo contagious as is commonly ſuppoſed, and aſcribes its ariſing and conſtantly prevailing in Turkey, and not in the reſt of Europe, to the uncleanly habits, and to the careleſsneſs, indolence, and indifference of the Mahomedans, in conſequence of the religious tenet of predeſtination. When the plague was in this country, it chiefly affected the loweſt order of the people, who lived in ill-ventilated habitations, and were uncleanly in their perſons. This is a remark of Lord Clarendon, in the Hiſtory of his own Life; and he ſays, that upon his return to London, he and the other

other people of condition, hardly miſſed one of their acquaintances who remained there during the plague. It has long been aſcertained that the ſphere of peſtilential contagion is very ſmall; and ſome are of opinion that abſolute contact is neceſſary in order to its being caught. However this may be, it is evident that it peculiarly affects the inhalants of the ſkin, and not the organs and avenues of reſpiration, like moſt other infectious febrile diſeaſes. All the peculiar diſcriminating ſymptoms of the plague are in proof of this, namely, the buboes, parotids, and carbuncles. It is remarked by Dr. Ruſſell, with his uſual accuracy of obſervation, that the glands of the groin which are affected with buboes in the plague, are not thoſe which are affected in the venereal diſeaſe, but thoſe ſituated under them, through which the lymphatics of the lower extremities paſs. The ſwellings of the axillary and parotid glands are alſo in the ſituations we ſhould expect from the abſorption of virus by thoſe parts of the ſurface of the body which are moſt expoſed to the air, and the contact of external bodies. Carbuncles are alſo in proof of the connection of this diſeaſe with cutaneous abſorption; and upon theſe grounds we cannot but allow that the friction with oil had probably a great effect in preventing the abſorption of the peſtilential virus, and that this, as well as the other facts contained in this communication, ought to be made known to thoſe who are likely to be expoſed to this contagion, or whoſe duty it is to give directions for the prevention of this dreadful epidemic.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

I IMAGINE that the following circumſtance, an account of which I have lately received from Dr. Jaques, of Harrowgate, will not be deemed unintereſting or improper for your Journal. I, however, have to regret that the detail is not ſo complete as I could have wiſhed.

Dr. Jaques was deſired to viſit the apprentice of an apothecary at Harrowgate, whoſe head ſeemed very much affected, ſo that he ſcarcely knew either what he did or ſaid, and ſeemed to labour under a kind of inſanity. His tongue was very foul and ſwoln, and he ſpit very much, which induced Dr. J. to ſuſpect that he was under the influence of mercury; this, however, he poſitively denied. As he was very coſtive, Dr. J. preſcribed a laxative

a laxative medicine, which operated and relieved his head conſiderably. His complaints, however, returned with increaſed violence, in conſequence of which he was ſent home to his relatives, at the diſtance of ſome miles, where his maſter attended him occaſionally.

One day, when his powers of recollection ſeemed better than uſual, he mentioned a circumſtance, which Dr. J. believes was the cauſe of his diſeaſe. A perſon had come to the ſhop for ſome white arſenic, which he wiſhed to have made into pills with butter and wheat flour; theſe pills the young man rolled in his hands, and ſaid that he was never well after that day, though it was ten days after this before he was obſerved to be ill, and three weeks before he mentioned his ſuſpicion of the cauſe of it. Dr. J. ſaw him after this at his father's houſe, but he was then in the agonies of death; but from what could be learned from his parents, his lower and upper extremities had for ſome time been paralytic, with violent pains in the muſcles, as well as the bowels. Dr. J. ſays, that he has no doubt in his own mind as to the cauſe of his death. This caſe tends to ſhew that arſenic, as well as ſome other metallic poiſons, may be taken into the ſyſtem by the abſorbents, and produce its baneful effects upon the conſtitution. Many of the ſymptoms in this caſe reſembled thoſe produced by the poiſon of lead, only they were more violent.

I am, &c.

Royal Inſtitution, May 8th, 1801. THO. GARNETT.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IT will afford many of your readers no ſmall degree of ſatisfaction to hear, that Vaccine Inoculation is eſtabliſhed in the Eaſt and Weſt Indies, in Sicily, and in Ruſſia.

By an over-land diſpatch, lately arrived, we are informed it is practiſed at Bombay; probably, by means of the matter ſent from Conſtantinople by Dr. Whyte; and it is eſtabliſhed at Jamaica by Mr. Rooke, Surgeon, at Montpelier, Montego Bay.

Mr. R. having inoculated himſelf and fifteen negroes with vaccine virus received from Dr. Croft, infection took place in himſelf alone. In conſequence of the frequent failure of infection, in his own hands and thoſe of others, Mr. R. began to ſuſpect that people of colour were inſuſceptible of the diſeaſe.

He

He is now well convinced that this ſuſpicion was unfounded. Nevertheleſs the inſertion of the vaccine fluid in his own arm was ſingularly providential.

When the laſt advices were received from Mr. R. he had ſucceſsfully inoculated all the people on the eſtate of Charles Roſe Ellis, Eſq. except thoſe who laboured under the yaws; and many of them had been ſubmitted, both by effluvia and inoculation to the infection of the ſmall-pox, which they reſiſted.

By theſe inconteſtible proofs of its efficacy, the moſt incredulous were convinced; and the practice was making a rapid progreſs throughout the iſland. The ſmall-pox had been fatal to many eſtates. In one, where it was making the moſt dreadful ravages, it was ſoon checked by the introduction of the cow-pox.

By a letter from Dr. Marſhall, dated Palermo, March 27, 1801, I am informed, that he arrived in Sicily on the 12th of that month, and had commenced the vaccine inoculation with ſucceſs. The King of Naples has appointed an hoſpital, where his firſt phyſician and firſt ſurgeon are to inoculate, under the direction of Dr. Marſhall and Dr. Walker, and inſtruct the other phyſicians and ſurgeons of the country, that the practice may be eaſily propagated and permanently eſtabliſhed in that kingdom.

At Peterſburg, Dr. Halliday has inoculated ſeveral perſons in the hoſpital, with the ſame happy ſucceſs that has attended the practice in every other country.

I am, &c.

New-ſtreet, Hanover-ſquare,
May 20, 1801.

JOHN RING.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

WHILST the efficient cauſes of many phenomena in nature remain veiled amidſt impenetrable obſcurity, the philoſophic mind is occaſionally cheered with the illumination of a general principle preſented to his view by the laborious induction of facts. Hence, to apologiſe in preſenting a medical caſe or two, would to you be ſuperfluous.

During the late ſeaſon, when dyſentery raged with more than uſual violence, a very ſimple treatment was found very ſucceſsful; the oleum ricini, in the form of an emulſion, with the occaſional uſe of anodynes, was my conſtant practice. When ſtrong

ſtrong inflammatory, or urgent typhoid ſymptoms ſupervened, the anti-phlogiſtic or tonic plan was ſuperadded.

Under this ſimplicity of treatment, I had the gratification to ſee a numerous ſet of patients recover, without exception, except in two inſtances. The firſt was of a perſon who neglected to obtain medical aid till within a few hours of death; the other is one of the ſubjects of this communication.

After the reſolute perſeverance in the above plan during three weeks, James Houghton, ætat. 4, was ſenſibly and rapidly declining; his appetite was gone, his emaciation very conſiderable, his ſleep much diſturbed, his pain in the abdomen inceſſant, his pulſe rapid and feeble, and his loſs of blood per anum, from its quantity, highly alarming. In ſhort, a gradual decline had apparently begun. Under theſe circumſtances, I felt hurt at the idea of loſing a patient in a diſeaſe whoſe malignity I had deemed, from experience, not to be dreaded. He was the only child of affectionate parents, hence an object of peculiar anxiety to a medical practitioner. Under theſe circumſtances, I uſed the artificial muſk mentioned in your Journal, as from its effects there ſtated, and its chemical hiſtory, it appeared to augur well. After one week's exhibition of this medicine, together with the continuance of laxatives, which were ſtill indiſpenſable, the child demanded animal food, but rejected vegetables; he was indulged, and a beef-ſteak was not only taken with impunity, but with manifeſt advantage. The pain had ſubſided, his ſleep was refreſhing, and his pulſe, from this time, both as to velocity and ſtrength, returned by gradual progreſſion to its natural ſtandard.

The other caſe with which I wiſh to trouble you, is of a boy ſeven years old, and afflicted with pertuſſis. The fits of coughing, together with the ſucceeding inhalation of breath, were always attended with a very near approximation to general convulſion. Pain of the ſide was acute, head ſeverely affected, pulſe rapid, feeble, and intermitting.

He had been previouſly attended, with much judgment, by one of the apothecaries to our Diſpenſary; yet the ſymptoms becoming daily worſe, he applied to me.

His family I find to be conſumptive; his aunt is now labouring under a ſevere hæmoptoe, and has a ſcrophulous aſpect; his brother died of hooping cough, after long lingering in a ſimilar ſtate to the ſurvivor. After the application of leeches, and a bliſter to the ſide, I attempted the uſe of Digitalis, which had been renounced before my attendance, owing to the ſtomach rejecting it. I was under the ſame neceſſity of yielding to ſimilar circumſtances. I now reſorted to aſſafœtida. This is a medicine whoſe efficacy in the latter ſtage of this diſ-

eaſe has been occaſionally remarked to be very great, and at other times to be very inert.

The pain of the ſide was now removed, but other ſymptoms of a more threatening nature preſented. His emaciation increaſed; morning ſweats regularly prevailed; and pain, nearly conſtant, harraſſed him in the lumber region. This laſt ſymptom was much aggravated by the fits of coughing.

A hectic fluſh in the afternoon, and expectoration of blood, began to ſhew themſelves, and he complained of conſiderable chilline ſs. We had now recourſe to the artificial muſk. During a fortnight, the ſymptoms appeared to be ſtationary. The pain which I laſt mentioned, ceaſed about this time, and the pulſe aſſumed a regular and fuller beat.

Since this period the morning ſweats and threatened hectic have vaniſhed; the countenance has now the cheerful playfulneſs of childhood; his ſtrength is returning; his appetite is good, and the paroxyſms of coughing are, comparatively, ſeldom, and mild. No other medicine was given at this time; we may, therefore, attribute this ſtate of convaleſcence to the unaſſiſted energy of this powerful remedy.

In caſes of anorexia and general irritability of the ſtomach induced by the baneful exceſſes of inebriation, it will be found beneficial. I have only preſcribed it to *ſpirit drinkers*.

Since the dyſenteric caſe already recited, it has been advantageouſly uſed by adults when the diſeaſe has been long protracted.

My formula has been, the tincture joined with the dec. lin. ſo as to adminiſter from fifteen to twenty or thirty drops to children, and even fifty to adults, twice or thrice within the twenty-four hours. I am, &c.

Liverpool, April 10, 1801. R. LEWIN.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

AMONG many important purpoſes your uſeful publication is calculated to ſerve, not the leaſt is, that it affords a refuge to minute and detached hints and obſervations, which, though not of ſufficient conſequence to be uſhered into the world in a ſeparate publication, yet by their accumulation, may aſſiſt in promoting the improvement of medical ſcience. Under this impreſſion, permit me to offer you a trifle, which, if it will not take

take up too much room, to the exclusion of more important communications, you may, perhaps, favour with a place in your next Journal.

Some time ago, Dr. Beddoes recommended as a cure for the tooth-ach, to bruise a *lady-cow* between the fingers, and apply them to the aching tooth, and the experiment was, I believe, often attended with the desired effect. The insect meant I take to be the coccinella septem punctata of Linnæus. But as those animals are not to be had at all seasons of the year, it occurred to me that a tincture of them might probably answer the same purpose as the fresh insect; and there happening to be a great abundance of them last summer, I desired the apothecary to our Infirmary to make a saturated tincture of them in proof spirit, which has proved of great service in several instances of tooth-ach: But the circumstance to which I wish principally to draw the attention of your readers is this; that the tinctura coccinellæ, in colour, smell, and taste, very nearly resembles a tincture of opium. If it should also turn out to have similar, or any other, good effects when given internally, it may be a fortunate discovery; but on this head I regret my inability to say any thing at present, as the bottle in which it was made was unfortunately broken, and only a small quantity of it saved. This hint, however, will, I dare say, be sufficient to induce many of your readers to make it, and try its virtues; and should any beneficial consequences ensue, the purpose of this letter will be fully answered to,

Your, &c.

Worcester, 6th May, 1801. CH. CAMERON.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

IF you deem the following cases deserving a place in your valuable Journal, they are at your disposal, and their insertion will greatly oblige, Your's, &c.

Painswick, May 3, 1801. C. T. PHILIPS.

Though the mass of evidence brought forward by many of the most eminent professional characters, not only of this but of other countries, respecting the superior advantages the Vaccine Disease possesses over the Variolous, and which, to unprejudiced minds, leaves not a doubt; yet still, as there are many who are

decidedly inimical to, and prejudiced againſt it, every ray of information which will tend to ſerve his fellow-creatures and the cauſe of truth, every man is bound by a reciprocal duty to bring forward; and as your excellent work particularly promotes theſe intentions, permit me to offer my ſmall tribute of evidence in favour of the inoculated cow-pox, and to mention an irregularity which lately fell under my obſervation.

February 23d, I inoculated the Rev. Mr. F.'s two younger children and ſervant girl with the vaccine virus. 25th, Inflammation nearly obliterated. 26th, I was induced to repeat the operation on the ſervant girl, as there did not remain the leaſt veſtige of inflammation either in her or the childrens' arms.

From the 26th to March 2d, I examined her arm daily, (Sunday excepted), but the inflammation was ſo trivial as to lead me (as well as Mr. F.) to conclude the infection had not taken, and I in conſequence wrote to the perſon who favoured me with the virus, to inform him of the diſappointment I felt, and to requeſt a freſh ſupply, conceiving its failure might depend upon its ſtaleneſs. To my great ſurpriſe, on Saturday following, the 7th, I was deſired to viſit her, and upon inſpecting the arm, found the infection had taken, and to appearance the puſtule was characteriſtic of the 8th day of the diſeaſe, though ten from the *ſecond* inoculation. From her I immediately inſerted matter into each of the childrens' arms, who both went through the diſeaſe with little or no indiſpoſition, though the progreſſive appearances upon the arms were ſufficiently diſtinctive to relieve me from any anxiety reſpecting its being the genuine diſeaſe.

April 22d, I inoculated the above three perſons with variolous matter, taken the day before from a healthy young woman labouring under the ſmall-pox from inoculation; and to give the experiment every poſſible chance, I inſerted a conſiderable quantity of matter. 23d, Inflammation in all, ſufficient to denote infection, had they been capable of taking the diſeaſe. 24th, Inciſions ſtill more inflamed. 25th, Inflammation much leſs in youngeſt child and ſervant, rather more in the eldeſt's arms. 26th, Did not ſee them. 27th, Inflammation declining in the eldeſt, and nearly gone in the youngeſt child and ſervant. 28th, In each the inflammation rapidly dying away. Saturday, May 2d, The arm of each perfectly well.

In all, I have inoculated for the cow-pox 33; and from the experience I have thus far had of the diſeaſe, I feel fully ſatisfied of its moſt decided ſuperiority over the ſmall-pox. My patients, in general, were but little indiſpoſed, and I have not experienced one alarming, troubleſome, or puſtular caſe.

To

To the above cafes I have to offer one of a fpafmodic contraction of the fphincter veficæ urinariæ and urethra fucceſsfully treated with the tinctura ferri muriati.

Enoch Daniels, a child ſix years old, was brought to me, labouring under moſt excruciating pain upon voiding his urine, which would ſuddenly ſtop when he had diſcharged about one half. The pain uſually ſeized him about a minute before, and continued about the ſame time after making his water, during which time his ſufferings were moſt urgent; ſo great, that he would ſcream to be heard to a conſiderable diſtance, graſping forcibly the penis, and incurvating his body. He was perfectly eaſy in the intervals, and in all other reſpects tolerably well; though ſome little time before he had a fever, of which he was cured with the ſaline antimonial mixture. Not being perfectly well ſatisfied at firſt, as to the nature of his caſe, and ſuſpecting he might be troubled with a calculous affection, I ordered him the Aq. kali pur. gt. v. bis in die ex poculo decoct. rad. althææ, from which he derived ſome little benefit. Still further to ſatisfy myſelf as to the preſence of calculi, I ſounded him, but could not find any thing to juſtify an opinion upon that head and his ſufferings ſtill continuing, I was induced to try the above-mentioned remedy, recollecting a caſe ſpoken of by Mr. Cline in his lectures, and to which I conceived the preſent very analogous as to ſymptoms. Mr. C. I think, in his caſe, recommended ten drops of the tincture to be taken every ten minutes during the ſpaſm. In this caſe, I deſired three drops to be taken in a little water every ten minutes, upon the coming on of the ſpaſm, and continued till it ſubſided. Upon ſeeing him the third day from beginning the tincture, I found him much better; continuing the ſame doſe a few days longer with decided good effect, I ordered the tincture to be increaſed two drops, from which he experienced ſtill greater relief. After taking about three drachms of the tincture, he was ſo much better as to have little or no pain upon making water, and that only occaſionally. I now ordered gt. v. bis terve in die; from a continuance of which I have the pleaſure to ſay, he is ſo far recovered as to bid fair for a perfect cure.

He was ſo far recovered at one time as to loſe all pain; but relinquiſhing his medicine too ſoon, he had a trifling relapſe; however, by reſorting to it again, he experienced its former efficacy.

Remarks

Remarks on the two Hypotheses produced by M. LAVOISIER, *to account for the Elaſticity of Aëriform Fluids, with an Attempt to the further Illuſtration of the Subject.*

"Follow Nature."

M. LAVOISIER, in the firſt chapter of his Elements of Chemiſtry, treats on the formation of aëriform fluids, and ends the article, by illuſtrating the cauſe of their elaſticity. He ſays, that, "It is by no means difficult to perceive that their elaſticity depends on that of caloric, which ſeems to be the moſt eminently elaſtic body in nature." Now it would ſeem that the elaſticity of aëriform fluids is not dependent altogether on caloric, merely as partaking in common with its properties; for, upon the conſideration of circumſtances, and the change which is effected in the arrangement of the particles of a body reduced to the aëriform ſtate, being properly appreciated, its elaſticity would appear to be depending more on the increaſed force given to the action of the repulſive power,* inherent between its particles.

Nothing appears more eaſy of conception, before we enter upon enquiry, than that one body, by entering into combination, ſhould partake of the quality of another; and thus, becauſe caloric appears to poſſeſs the quality of elaſticity in a more eminent degree than any other body in nature, it perhaps would appear extremely plauſible to account in this way for the elaſticity of aëriform fluids, and content ourſelves by ſaying that caloric conveys the quality of elaſticity to bodies; but enquiry and conſideration make it appear that this is a very undetermined mode of explanation. It cannot anſwer a queſtion, nor remove a doubt on the ſubject, and leaves us entirely ignorant what elaſticity is. Can we be ſatisfied that caloric retains the quality of elaſticity, after its diffuſion through bodies? We are to conſider that a combination takes place *chemically*, between the baſes of aëriform fluids and caloric; and how far the remaining caloric, in diffuſion, retains its elaſticity as when in a free ſtate, muſt alſo remain doubtful, as long as it is a query, whether caloric does not loſe this quality when in a quieſcent ſtate? or, at leaſt, whether it does not ſuffer a partial deprivation of it? for elaſticity is a quality wholly dependent on circumſtance, and not an inherent quality, which a body

* M. Lavoiſier has produced a confuſion in our ideas on the power of repulſion, by confounding the effect of caloric with the operations of the repulſive power itſelf.

a body retains through all its modifications. A body in one ſtate may be non-elaſtic; in another, the moſt highly elaſtic of any body in nature. And as caloric is ſubject to combination, (indeed more ſo than any other body) we have a right to ſuppoſe that it is alſo ſubject to modification. And, further, that it is alſo ſubject to a *total* change of property; which ſuppoſition muſt evince the impropriety of accounting for the elaſticity of aëriform fluids, by ſuppoſing they partake of it with caloric, ſince the poſſibility is evident of its being deprived altogether of this quality upon combination, or even upon a ſlight modification of its exiſtence.*

M. Lavoiſier produces a difficulty in conceiving how the repulſive power acts upon very minute particles, placed at great diſtances from each other; that is, I ſuppoſe, he conſiders all connection loſt, for, while there is connection, there can be no difficulty in the ſuppoſition. It is very natural to conclude that the particles are connected from the preſſure always exerted on bodies expoſed to the atmoſphere, and likewiſe from the attractions exiſting between them, whoſe force of action we may reaſonably compute to be about equal to the contrary one exerted by the repulſions between the particles of compact bodies; for the two powers under theſe circumſtances appear to be very ſimilarly ſituated as to their range of action, and ſince it appears that the particles of the moſt compact bodies do not touch each other, from the repulſions exiſting between them. Have we not as much reaſon to imagine that the particles of a flint do not mutually repel each other, as to ſuppoſe that the particles of a gas do not mutually attract each other?

M. Lavoiſier ſeems likewiſe not to have admitted, or at leaſt has not ſufficiently noticed, the modifications of the attractive power in the ſeveral ſtates of rarefaction in bodies. Speaking of the different ſtates of exiſtence of bodies, in one place he ſays, "that they would almoſt inſtantaneouſly paſs from the ſolid ſtate of aggregation to that of aëriform elaſticity, was it not for the preſſure of the atmoſphere. Now this could not happen, without the power of repulſion ſo far overcoming the

* Here caloric is conſidered as a body, in compliance with M. Lavoiſier's doctrine; in ſhort, it is very difficult to conſider it in any other light; for how a property can cauſe a change upon that on which it entirely depends, is yet to be explained. Properties are wholly paſſive, they never change, but are changed, hardneſs is a property of many bodies, but, when they become ſoft, it cannot be ſaid that the *hardneſs* produced the ſoftneſs, or, *that it went away of its own accord*; but, that ſuch bodies being acted upon by ſome external agent entering into a ſtate of modification, loſe this former property of hardneſs, and take on ſuch of the then exiſting circumſtances.

the attractive one, as to produce that degree of separation between the particles of the body, *sufficiently distant*, to give it the aëriform state. Unless the modified states of this power is noticed, it carries with it a sense of its annihilation. For instance; saying "that ice, when exposed to a temperature above 32°, loses its solid form, owing to its particles no longer being held together by reciprocal attraction," is a language that does not carry with it the idea of the modification of the attractive power between the particles, but a total extinction of it. The particles of water, (when fluid) certainly have not so great an attraction to each other, as when they were in the form of ice, yet they certainly have reciprocal attraction, both in this and the vaporous state, unless we can imagine a regeneration of this power upon the condensation of vapour. So requisite is it, that the increase and diminution of the two powers between the particles of bodies should be strictly kept up, by our ideas being made familiar with the different arrangements they undergo upon the change of circumstance, from *rarefaction* to *condensation*, and the *modified states* of each, that without such we can have no true idea of elasticity, which is wholly dependent on the circumstance of such arrangements.

The other hypothesis that M. Lavoisier produces to illustrate the subject is, "That the particles of caloric have a stronger mutual attraction than those of any other substance; and that these latter particles are torn asunder in consequence of this superior attraction of the particles of caloric, which forces them between the particles of other bodies, that they may be able to re-unite with each other." Now this has certainly many obstacles to encounter. If such reciprocal attractions did exist between the particles of caloric, should we not see in it some uniform, determined existence? When the mind takes a survey of the operations of the attractive power in other bodies, it is very difficult for it to conceive this superior attraction existing between the particles of caloric, at the same time observing it to be diffused throughout nature. One would think, if this superior attraction did exist, that in some one instance caloric might be found in an uncombined state. Though chemistry is a science founded on experiment, and not dependent in the least on our reasonings; though changes and combinations take place, which we never could judge of a priori; yet the reasoning from appearances should be attended to in an hypothesis, as it is the only guide we possibly can have in search of explanation. The particles of caloric may have this superior attraction existing between them; but when we enumerate circumstances, they all seem fully to contradict the idea, and of course it ought to be exploded, till something can be produced

to

to authoriſe the ſuppoſition. Suppoſing this highly attractive power to exiſt, it is very evident that the reciprocal attraction between bodies and caloric muſt neceſſarily be *eminently* great, or elſe the diffuſion of caloric could never take place. Here a difficulty is produced. However great the attractions may be between the particles of a body, there ſurely can be no doubt but that they are ſurmounted when the body enters into combination; therefore, the queſtion is, What end can this ſuppoſed eminent attraction between the particles of caloric anſwer, when the reciprocal attraction between the combining body and caloric is in itſelf ſufficient to ſuſpend the particles of each? We have here created a power, without giving it its uſe. We might as well account in this way for every combination which takes place throughout; we might as well ſuppoſe a ſuperior attraction exiſting between the particles of ſulphuric acid, and that its particles are forced, in conſequence of this ſuperior attraction, between thoſe of the bodies with which it combines, in order that they may effect a re-union — inſtead that the reciprocal attraction between the acid, or *the elements of the acid*, and the bodies ſubject to ſuch combination, is ſuperior to the power of coheſion exiſting between the particles of each.

From what has been ſaid, it would appear that the reaſoning from appearances and analogy does not co-operate with the opinions, that the elaſticity of gaſſes is either dependent *ſolely* on that of caloric, or that there exiſts that *ſuperiority of attraction* between its particles to effect ſuch an arrangement among the particles of bodies, from which elaſticity is produced. The firſt opinion muſt be done away, I think, upon inveſtigation; the latter ſeems wholly contradictory to circumſtances, and bears with it that undetermined mode of explanation, that our thoughts are led away by fancy, and bewildered in a labyrinth of doubts. From ſuch an hypotheſis, no illuſtration can ariſe; it checks inſtead of aſſiſting the ſearch, and throws an obſcurity over the whole. Simplicity is the firſt recommendation to an hypotheſis; and the beſt mode to ſimplify, is to judge the darker operations of Nature by thoſe which ſhe performs under our more immediate obſervation. In this way I have endeavoured to account for the elaſticity of gaſſes, not ſuppoſing any thing but what was authorized by natural concluſion. I have ſaid, that there is an increaſed force, or rather an increaſe of action, given to the repulſive power exiſting between the particles of bodies when caloric is diffuſed in them; becauſe it is evident that the particles of bodies are removed from each other when heated; and likewiſe I have doubted, how far caloric retains the property of elaſticity* upon combination, becauſe I ſee

* If admitted to have this quality.

other bodies, upon combining, ſuffer change, more or leſs, in their properties; and likewiſe from the conſideration that elaſticity is a quality given to bodies only in particular ſtates of exiſtence; that it is not a peculiar quality given to any particular body, or a quality inherent in all bodies, *but common to all*, and *wholly dependant on circumſtance*. Hence then it would appear that caloric, by entering into combination to a certain degree with a body, produces that change of arrangement, or that degree of ſeparation between its particles, as to give to the repulſive power exiſting between them, that ſufficient range of action, ſo far to overcome the *hinderance* of the atmoſpheric preſſure, and *that* of the power of attraction (exiſting likewiſe between the particles) as to give it the aëriform ſtate; and the *ſtill* perſiſting efforts of this power to overcome the *reſiſtance* of preſſure, and its *re-action* upon *deſiſted* compreſſion, conſtitute the elaſtic quality of the body.* Thus far we may venture to ſpeculate; but what the change is which caloric ſuffers upon combination, or what degree of elaſticity it gives to bodies, merely as poſſeſſing the *quality* of elaſticity, we are at preſent ignorant of. Here then I muſt leave the ſubject to the ingenuity of others; a ſubject reſting on ſpeculation, without an experiment to illuſtrate either cauſe or effect. In ſuch a ſituation reaſon has much to withſtand; the ardour ariſing from novelty, the pleaſure derived from compariſon, the flights of fancy, and the natural bent the mind ever has to throw a myſterious confuſion on ſubjects unknown, all conſpire to maze it in complexity. Perhaps the ſtill truth may never be illuſtrated, yet the ſpirit of enquiry never ought to flag: If it cannot clear up the myſtery, it will ever have its good effects, in reducing the mind to a proper ſcale of action, in habituating it to arrange appearances in ſome order for diſcuſſion, and by rejecting ill-founded opinions, in guarding the more fundamental part of the ſcience from injury.

The Progreſs of the Vaccine.

WE learn from the French Official Paper, of the 5th and 8th Ventoſe, that the new Inoculation makes great progreſs in France. After naming the committee appointed to ſuperintend

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* Conſidering the yet abſtruſe nature of the ſubject, I thought it prudent not to ſay any thing on the action of the attractions exiſting between the particles, though I muſt ſay I cannot think their operations can influence much the elaſticity of ſuch bodies.

tend the firſt experiments, they ſay, " They have had the ſatisfaction of ſeeing their labours crowned with all the ſucceſs they could deſire for the time. The Vaccine ſpreads with great rapidity among all claſſes of ſociety; and in the departments where the ſmall-pox has produced terrible ravages during the laſt years. The trials made at Vaugirard, in the houſe and under the direction of Citizen Colon, have furniſhed a kind of ſchool, and a ſource of rays which this young phyſician, by his ſingle exertions, has rendered luminous, with a rapidity and ſucceſs which have merited for him the thanks of the public at large.

The number already inoculated amounts to ſeveral thouſands; and a great part of the phyſicians of the departments are haſtening to confer the benefits of this method upon their fellow-citizens. We ſhall, perhaps, be excuſed, if we merely give here the information we have derived from Citizen Colon himſelf, and the authenticity of which he guarantees.

Inoculated by him at Paris, of both ſexes and every age, 250. By others: At Gand, 150; at Arras, 70; at Nancy, 120; at Rouen, 151; at Lille, 100; at Saint-Tulle, near Marſeilles, 147; at Verſailles, by practitioners whoſe names are alſo mentioned, 227; at Toulouſe, 40; at Narbonne, 60; at St. Quentin, and its neighbourhood, 300; at Lombes, 30; at Riom, 80;—Total, 1764.

In this number are not compriſed, thoſe who have been inoculated by thirty-ſix other phyſicians or ſurgeons, to whom he has ſent vaccine virus; nor a great number of inoculations performed with ſucceſs in Paris, by Citizens Guillotin, Thouret, Leroux, Cattet, Portal, and other practitioners, well known and eſteemed by the public.

An important remark to be made on this ſubject is, that the government has exerted no influence whatever on the operations neceſſary to demonſtrate the advantages of the new inoculation; that its intervention has been confined to the facilitating the means of obtaining young children from the hoſpital of Maternity, who have been taken care of and attended at the houſe of Citizen Colon, with all the attention and tenderneſs which they could have experienced in the houſe of their parents. Every thing elſe has been ſo entirely committed to the ſkill, the zeal, and the intelligence of the Medical Committee that no kind of reſtraint has been put on the opinions or the conduct of the phyſicians who have conducted this important experiment. The ſucceſs of it is now eſtabliſhed. It is demonſtrated, that it preſerves from the ſmall-pox; and the laſt trials made at the Prefecture of Paris have, on this point, produced the higheſt degree of conviction.

In theſe trials, which were made on the 11th Nivoſe, and which the phyſicians called the *Counter-proof*, ſeven young children who had been *vaccinated* from three to four months before by Cit. Colon, were inoculated with ſmall-pox matter by Cit. Amé, the well-known inoculator, in the preſence of many medical practitioners. The variolous matter was taken by Cit. Evral from a child of Cit. Frochot, who then laboured under a copious eruption of the natural ſmall-pox. Of theſe ſeven children, thus inoculated, in three places each, not one took the ſmall-pox, which proves, in the moſt ſatisfactory manner, the efficacy of this method as a preſervative againſt it.

Citizen Frochot is not the only magiſtrate who has been deſirous of determining clearly, and under his own obſervation, the utility of the vaccine; the zeal and care exerciſed at Saint Quentin by Cit. Dumes, Sub-Prefect of this diſtrict, who, to emancipate his fellow-citizens from the ravages cauſed laſt year by the ſmall-pox, was eager to invite Cit. Colon to St. Quentin, to propagate and naturalize the vaccine, which has been done with the greateſt ſucceſs.

Moreover, very recently, Cit. Corbigny, Præfect of the department of Loir et Cher, had ſent expreſſly to Paris Cit. Deſperanches, a ſurgeon of eminence at Blois, accompanied by a young child, to purſue the treatment of the vaccine at the houſe of Cit. Colon, and to carry back the vaccine virus into his department, with a view to propagate and naturalize it.

Such are the facts within our knowledge, and of which we think it our duty to inform the public and our neighbours, who may wiſh to profit by our experience.

We will only add one word more upon the application of this diſcovery to the adminiſtrators of the government.

According to all the records of medicine, the ſmall-pox is fatal to one out of ten which it attacks.

The vaccine, which abſolutely guards from the ſmall-pox, preſerves to the community all thoſe who would have been carried off by the ſmall-pox.

If the proportion of theſe to thoſe dying of every other diſeaſe were aſcertained, we ſhould know how many we ſave annually by the means of the new inoculation.

It appears from the ſtatement of Cit. Mourges, in his Statiſtical Eſſay, that out of 1183 deaths at Montpelier, in the years 1774, 1778, and 1783, on an average of the three years, there died of the ſmall-pox 420.

The Tables of Cit. Bottin, inſerted in the Annuaire of the Bas Rhin, prove, that of 2170 deaths, 158 were victims of the ſmall-pox.

Admitting this proportion, which does not depend on a particular

ticular epidemic, as applicable to all the departments, the result will be, that the number of deaths by the small-pox is one in fourteen.

The number of deaths in France, then, amounts, on an average, to 900,000, and of this number the small-pox, on an average, carries off 64,285 5-7ths.

The result of which proves, that there is an indissoluble connection between the advancement of useful science and the strength and prosperity of states."

On the Medical Use of Alkalis, by Dr. Stutz.

[Continued from our last, pp. 219—223.]

On the 13th of July, 1800, I was sent for to visit a young woman, 23 years of age. I found her in bed, seized with the most violent convulsions. The extremities were bent and turned in several directions, and when the convulsions remitted in the extremities, the trunk, and particularly the breast, was attacked with great violence, and a short, frequent, and laborious breathing, attended with singultus, came on; the jaws were locked, and the otherwise fresh and blooming countenance of the woman grew pale and cold at each paroxysm. Both hands and feet were likewise cold, and of a bluish colour. Pulse small, weak, and irregular. Besides these symptoms, the patient became deprived of speech; and though she remained during the paroxysm perfectly sensible, yet she could not utter one syllable. Under these circumstances I could not acquire any information respecting the cause of the present disease, particularly, as the parents assured me she had always been quite well till this day, when, on coming from church, she had fallen down in a swoon, after which the convulsions ensued. I had therefore no other indication than that of employing such remedies as might restore the irregular action of the organic fibre to an equilibrium, or, in other words, which act as antispasmodics; for this purpose I thought I could not choose a better remedy than the alkalis, after what I had experienced from them in one of the most violent spasmodic diseases, the tetanus. I prescribed, therefore, one drachm of purified vegetable alkali, (sal tartari) dissolved in four ounces of water, of which I ordered a table spoonful to be taken every quarter of an hour. As I purposed to try the alkalis by themselves, I gave no opium nor any other remedy. It was impossible to prevail on the parents to put her into a hot bath impregnated with

with kali. About eight o'clock in the evening I was called again, when I found that though the convulsive paroxysms had abated for some time after the medicine, they had recurred about an hour since with increased vehemence. The patient suffered the most violent distortions in the extremities; and when these remitted, the respiration became convulsive and laborious to such a degree that the body was most violently thrown up. As these symptoms were lessening, the patient breathed with great difficulty and much rattling, the countenance grew pale, the whole body became cold, the pulse weak, and every body who saw her, imagined her dissolution to be very near. But on a sudden, the convulsive fits wrested and distorted both hands and feet; and it was indeed astonishing how those violent actions could be excited in a body that was almost exhausted. In this way the fits continued in an uninterrupted series; and an apparent struggle between life and death, kept her friends in continual suspense. In this deplorable situation, however, I became not dispirited, but being resolved to leave nothing untried that could resuscitate the dying flame of life, I endeavoured to give her some table spoons full of the alkaline solution, which she had not taken for above one hour, the parents expecting her death to be inevitable; after which I ordered warm fomentations of soap water with lapis causticus to be applied on the belly, and the whole body to be washed and rubbed with the same solution; and two table spoons full of the above alkaline solution to be continued every quarter of an hour. Before I left her, she had another violent fit, that was probably excited by holding strong spirits of hartshorn under her nose. The vehemence of this paroxysm abated however by degrees, and the patient lay with a short, hurried, and rattling respiration.

On the morning of the 14th, I was told that she had frequently enjoyed quiet intervals, though the fits had as often recurred, with more or less violence. The fomentations had been diligently applied, not so the washing and frictions. She had taken a little broth that morning. When I saw her, she had shortly before been seized by another vehement fit, which being over, she found herself in a weak, and, except some difficulty in breathing, in a quiet state, and was quite sensible of what passed around her. I asked her very cautiously about the cause of her present disease, and heard, that after dinner she had over-heated herself with running very fast on a hot day, after which her nose began to bleed, and in order to stop the hæmorrhage, she had drawn cold water into the nose, and washed her head and neck. Some time after she had fallen into a swoon, out of which she was roused by the present symptoms.

ſymptoms. As ſhe was thus lamenting her ſituation, ſhe was ſeized by a very violent convulſive fit. I gave her immediately a doſe of the alkaline ſolution, when the convulſions ſoon abated, though the hands remained ſtiff and ſpaſmodically diſtorted. I preſcribed now two drachms of the kali to be diſſolved in ſix ounces of water, of which I ordered alternately, one or two table ſpoons full to be given every half hour, together with the continuation of the warm alkaline fomentations. About the evening of the ſame day I viſited her again; but how much was I aſtoniſhed, when I ſaw the room crouded with people, kneeling and praying, and the clergyman attentively engaged to prepare her for death, an event that was almoſt inſtantly expected. This ſcene however, ſurpriſed me exceedingly, as I had reaſon to hope from the ſituation I left her in the ſame morning, that ſhe was far advanced towards her recovery. I was then informed, that the patient had, a few quiet intervals excepted, been attacked by very laſting fits of convulſions, whereby ſhe had grown ſo weak, that they imagined ſhe would die every moment. On feeling her pulſe, I found it as weak and quick as yeſterday, and ſometimes intermitting. Though I conſidered her not to be in ſo bad a condition as the people about her fancied, I thought myſelf induced to quit the plan of curing this convulſive diſorder with alkalis only, and proceeded to the alternate application of alkali and opium. I preſcribed therefore *two* drachms of laudan. liquid. Sydenham, of which from ten to ſixteen drops were alternately given with the alkaline ſolution, and beſides this an emollient clyſter impregnated with alkali was applied.

The 15th, ſhe was much better, as the convulſive fits had almoſt entirely abated; after having three times given the doſe of the drops, the pulſe was ſtronger, undulated, and the countenance more lively. In lieu of the convulſions a ſpaſmodic trembling of the extremities had ſupervened, and ſhe complained at the ſame time of a dullneſs and inſenſibility in the limbs. A warm perſpiration ſurrounded the body, and it was not till after ſhe had ſuffered more than the anguiſh of death, that the patient began to recover a little. She took ſome broth and coffee with much appetite. I now began to doubt whether the opium by itſelf, without the aſſiſtance of the alkali, had not effected this remiſſion of the diſeaſe, and conſequently, in order to put the matter to a fair trial, I ſuffered no alkaline ſolution to be taken that day, but only to continue with the laudanum, twelve drops four times a day; the diet conſiſted of broth with the yolk of an egg, ſome coffee, and the emulſion of ſweet almonds. On viſiting the patient the ſame evening, I found her in a ſtrong perſpiration with an undulating pulſe, and

though

though the convulſions had not recurred, yet the trembling of the limbs was conſiderably increaſed, the reſpiration more difficult; ſhe complained of a painful ſhortneſs of breath, being at the ſame time very anxious and fearful that the convulſions might return. Under theſe circumſtances, I thought it not proper to diſcontinue the alkali any longer, and I preſcribed therefore a drachm and a half of pure potaſh in ſix ounces of water, of which every hour a table ſpoonful was to be taken, and of the laudanum eight drops only every two hours. A warm pediluſe of common lye was likewiſe ordered.

The 16th in the evening, the patient found herſelf pretty well, as ſhe had ſlept quietly for ſeveral hours, and only been once attacked by the ſpaſmodic trembling. The pulſe ſtrong and undulated. I ordered her to take two table ſpoons full of the alkaline ſolution three times a day, and eight drops of the laudanum twice; an emollient clyſter, containing ſome alkali was applied, her bowels having not been moved for above three days. In the evening ſhe was pretty well, and had ſuffered only two fits of the ſpaſmodic trembling.

The 17th, 18th, and the following days the patient grew by degrees better, the trembling ceaſed, and a dull ſenſation in the limbs only remained, a natural conſequence of the immoderate efforts of the muſcular and nervous ſyſtem, for which I recommended a ſtrengthening diet, and ſix ounces of aqua cinnamomi c. vino with one drachm of ſal tartari, and half a drachm of laudanum, of which ſhe was to take two table ſpoons full three times a day, and ſhe was allowed to drink wine mixed with a little water. In this way ſhe daily got better, and about eight or ten days after the firſt attack of the convulſive fits, ſhe walked about again, to the utmoſt aſtoniſhment of every body who had ſeen her in the convulſions.

4. I have ſeen two or three inſtances of *Cardialgia* in delicate women, ſubject to ſpaſmodic ſymptoms, where a few grains of ſal tartari diſſolved in camomile or cinnamon water, brought almoſt inſtant relief in removing the painful paroxyſm. Care ought however to be taken, not to give in the beginning too large a doſe of the alkali, for fear of cauſing an over irritation of the ſtomach, and other diſagreeable ſymptoms. But ſhould no relief be produced, after having conſumed one drachm, or one drachm and a half, we ought to proceed to the alternate application of alkali and opium. I have had a caſe of a pregnant woman very much inclined to cardialgia, who was troubled during the whole time of her pregnancy with heart-burn, vomiting, &c. for which complaints, mineral waters, fixed air, magneſia, lapides cancrorum, ginger, &c. had been employed without much avail, as the

the complaint always recurred a short time after. I prescribed therefore the sal tartari dissolved in aq. cinnamomi sine vino, upon which the complaints left her entirely for two days, but after this time they recurred. I increased the quantity of the alkali to one drachm and a half, by which the patient got relieved again; and in this way the proportion of the alkali was brought to two drachms and a half. This dose however causing a burning in the mouth and throat, and being at the same time of less effect, I diminished it to *two* scruples per diem, to be taken at four different times, and twice in the intervals seventy drops of laudanum, both which remedies cured, in one day, the heart-burn, vomiting, &c. for a considerable time, till they were again roused by an accidental cause; but they ceased upon employing the same remedies. This case showed the most striking analogy with the experiments of Mr. Humboldt, on the influence of chemical substances on excitability. The cardialgia was in the beginning solely removed by alkalis; but being again excited by any adventitious cause, the alkali, even in an increased dose, proved of no avail, but opium instantly relieved her. When, however, I intended to remove the pain by opium merely, it answered the purpose in the beginning, but when continued afterwards, it had no effect, even in larger doses. Alkali however, now given, operated to my expectations. This experiment I have purposely repeated three times, and the results were always the same; the alternate application of opium and alkali had always the expected effect; a fact that is likely to prove most advantageous to the medical art, in curing the most dangerous complaints.

5. I have had a case of spasmodic asthma, which the vegetable alkali solely removed. Different remedies, and the most efficacious antispasmodics had been tried in vain, till, when quite at a loss what to do, I had recourse to the oleum tartari per deliquium, which I gave by drops in increased doses; but I shall communicate my remarks on this case at another time.

Although I have hitherto had no opportunity of making experiments with alkalis in the following *general* spasmodic diseases, yet I am led to conclude from analogy and induction, and upon some other good grounds, that great use may arise from employing alternately the opium and alkali, 1. In *hydrophobia*, also soon after the bite, in order to prevent the breaking out of the disease; 2. In *epilepsy*; 3. In *catalepsy*; 4. In *the St. Vitus's dance*, *(chorea St. Viti)* in all which diseases I positively believe that the alkali, alternately administered with opium, and externally applied in a warm bath, will prove most efficacious, particularly in hydrophobia, a disease which seems so much to agree in several points with tetanus; and I am in-

clined to think, that the rational and timely application of this method of cure is likely to be crowned with ſucceſs, in a diſeaſe that generally fruſtrates medical aſſiſtance.

Having communicated my ideas and obſervations on the great uſe of alkalis in thoſe general diſeaſes, I proceed now to ſtate their efficacy in ſeveral topical complaints, when externally applied. 1. *In palsies* occurring after previous apoplexies, of which I have cured two caſes with alkali: The paralytic limb, arm, or foot, was put into a warm bath of common lye, with the addition of ſome lapis cauſticus; the quantity was increaſed by degrees, and after theſe repeated topical baths, the paralytic part received again its ſenſation and power of moving. In aſthenic gouty complaints, in the iſchiadic paſſion, thoſe warm baths may moſt probably prove of very great ſervice, and likewiſe in any weakneſs that frequently remains after fits of gout. 2. The cauſtic alkali is alſo of avail in foul aſthenic ulcers, of the ſoft as well as of the ſolid parts, on which it is applied after being diſſolved in a ſufficient quantity of diſtilled water: The affected part is, for ſeveral minutes a day, put into a warm ſolution of lapis cauſticus chirurgorum, of which, in the beginning, *one* or *two* grains are put to *one* ounce of water. At firſt it cauſes ſome pain, which, however, by continued application ceaſe, even when the quantity of the lapis cauſticus is increaſed: the ulcers become by that means clean, and the cure is uncommonly forwarded; they are afterwards only dreſſed dry, or with lint dipped into a diluted ſolution of lapis cauſticus. Of the ſucceſs of this cure I have had frequent experience, and I ſhall not omit communicating in future, the caſes that fall under my obſervation. Many will doubt the good effect of alkalis in caries, particularly thoſe who are unacquainted with the experiments of the celebrated *Dr. Lentin*, of Hanover, with the phoſphoric acid, which this gentleman found of much ſervice in that affection; but I truſt they will only retain their doubts till I ſhall have laid before them my ideas on the mode in which the alkalis ſeem to act upon organic bodies. I have endeavoured to draw the attention of medical men to the great uſe of alkalis in ſeveral dangerous diſeaſes, by relating to them what I have experienced in my own practice, and I ſhall at a future time take an opportunity of communicating my ideas on their mode of action. I am conſcious, that what I have ſtated here is not entirely new; alkalis were formerly much employed, though the theory which indicated their uſe was far different. The phyſicians of the time of *Helmont* and *Sylvius* employed them with the idea of ſubduing the exceſſive acidity of the humours that threatened to deſtroy the conſtitution; others uſed abſorb-

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ents and alkalis, to refift the feptic tendency of the blood; and but lately, *Dr. Barker** recommended lime water and fal abfinthii againft febrile difeafes, deriving, according to the ingenious theory of *Dr. Mitchill*, the material caufe of fevers from the oxydated azotic gas, or, as he calls it, feptic acid.

Many paths lead to truth, but to go the ftraighteft and fhorteft way is granted to few mortals.

CRITICAL RETROSPECT

OF

MEDICAL AND PHYSICAL LITERATURE.

[FOREIGN AND DOMESTIC.]

Recherches Phyfiologiques, i. e. Phyfiological Refearches on Life and Death, &c. By Xav. Bichat, &c. &c. Part the Second.

The fecond part of this work is far fuperior to the firft, becaufe, inftead of chimerical fpeculation, we meet with experience and reality, afcertained by the moft ingenious experiments made on animals. It is divided into 12 articles, in which the author examines the different kinds of death, originating either in the heart, lungs, or brain; for the ceffation of life begins fometimes with the death of the heart, before the lungs or the brain ceafe to live; fometimes with the death of the brain, whofe functions difcontinue, before the heart and lungs die, &c. according to which order the author treats his fubject.

Art. 1. *General Confiderations on Death*, a recapitulation of what has been faid in the laft article of the firft part. The influence of fociety has rendered the natural death rarer; and cafual death, occafioned either by accidents or difeafes, is the particular fubject of the author's contemplation.

Art. 2. *In what manner does the death of the heart produce the death of the brain?* The inftruments by which the heart acts upon the brain, are not the nerves, but the blood-veffels, and from that fource the death of the brain is to be derived. The red or arterial blood of the heart acts upon the brain in a double way: 1. By the habitual motion which it imparts to the brain. 2. By the nature of the principles which conftitute it. Hence it appears, why a ceffation of the functions of the left ventricle of the heart brings on death

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* See Medical and Phyfical Journal, Vol. I. p. 274.

death to the brain in an indirect way. A ligature of the carotids did not suddenly kill, on account of the anastomosis with the arteria vertebralis. The author endeavours to explain why animals, into whose system of vessels air is brought, suddenly die, from the cerebral motion being destroyed by the contact of the air, whence the function of the heart and the circulation are stopped. Young horses, whose blood-vessels were filled with air, tumbled down in convulsions, and expired a few minutes after.

Art. 3. *In what manner does the death of the heart produce the death of the lungs?* In the function of the lungs, two phenomena are observed; the first of which is purely mechanical, and consists in the elevation and depression, in the dilatation and contraction of the thorax, &c. by the muscles and diaphragm, and in the entry and exit of the air; the second is, chemical. When the heart ceases to act with the venous blood, the chemical process of the lungs is destroyed; but when the heart dies first with the arterial blood, the mechanical motions cease; because the death of the brain, which only acts upon voluntary muscles, occasions the cessation of the action of the parts belonging to the motive powers of the thorax.

Art. 4. *In what manner does the death of the heart produce the death of all the organs?* In *animal life*, 1. Because every organ is no more stimulated by blood; and, 2. Because the brain, by wanting itself the necessary stimulus, is unable to communicate it to the organs subordinate to it. In the *organic life*, 1. Because the necessary excitation is deficient. 2. Because the materials requisite for the continuation of this life are wanting. The author makes here some ingenious remarks on the excitation of the organs by the motion of the entering blood, and particularly on the different motions of the brain, which consist in an alternate elevatio and collapsus, that are caused by the entrance of the blood, &c.

Art. 5. *In what manner does the death of the lungs produce the death of the heart?* The suppression of the mechanical motions of the lungs is occasioned by different causes. The author, however, agrees with Goodwyn, that the folds of the larger and capillary vessels in and near the air-cells, do not obstruct the circulation of the blood, when *expiration* is for a long time continued; and he thinks likewise, that an extension of the air-cells, by a long continued inspiration, does not disturb the circulus sanguinis minor. The cessation of the mechanical motions stops the circulation, by destroying the chemical process. Mr. Goodwyn, however, is of opinion, that the cause of asphyxia may be derived from the black or venous blood not sufficiently stimulating the left ventricle. From a want of air fit for respiration the process of oxygenisation cannot proceed, and the body dies; because the left heart being paralysed, pushes forward neither black nor red blood. This opinion, however, appears insufficient to our author, on which account he proposes another, which likewise labours under some difficulties. Though he admits, in some measure, the paralytic effect of the black blood, yet he thinks that it still continues for some time

time to ſtimulate the red blood veſſels almoſt as much as the red blood itſelf; but as ſoon as it penetrates the inner texture of the heart, and the reſt of the organs, it deſtroys the life of every muſcular and nervous fibre; but whether this is done by a ſuperabundance of carbon or hydrogen, is not yet explained.

Art. 6. *In what manner does the death of the lungs produce the death of the brain?* The black blood, by penetrating the texture of the brain, deſtroys its action. On transfuſing red blood into the temporal artery, the animal remained lively and well; whereas the injection of venous blood killed it in a moment, and injected ink, gall, urine, ſerum ſanguinis, had the ſame effect. When theſe fluids were injected into the arteria cruralis, they occaſioned a ſtupefaction and paralyſis, but never death. The blood from the arteria carotis of a dog, affected with aſphyxia, when injected into the carotid of another dog, had a mortal effect.

Art. 7. *In what manner does the death of the lungs produce the death of all organs?* The author treats here of the proceſs of reſpiration and coloratio ſanguinis, which is performed in the extremities of the bronchiæ. The art of changing black blood into red, proceeds always in proportion to the quantity of air fit for reſpiration, that is contained in the lungs. An animal, breathing hydrogen and carbonic gas, becomes reſtleſs after three minutes, and 5 minutes after the blood of the carotids becomes black. The black blood penetrates the muſcles, nerves, ſkin, &c. hence the blue and livid appearance of the neck, cheeks, face, &c. in drowned people, or thoſe that are ſuffocated by the ſmoke of coals. The blood of the arteria umbilicalis in a pregnant bitch, lying in aſphyxia, was quite as black as that of the vena umbilicalis. There exiſts no difference of colour in the blood of the fœtus of the Guiney pig. The chemical proceſs in the lungs ceaſes always ſooner than circulation; and it is on his account that in dead bodies we always find black, and never red blood.

Art. 8. *In what manner does the death of the lungs produce the general death?* The ſucceſſion of the phenomena of general death, occaſioned by the death of the lungs, is related here. The aſphyxiæ do not merely depend on the penetration of the black blood into the texture of the lungs, brain, &c. but, 1. They ariſe from a want of air fit for reſpiration. 2. They come on when, beſides this, a deleterious fluid enters the lungs, as mephitic air, &c. which particularly ſeems to affect mortally the nerves of the lungs by entering into the blood, and even the brain itſelf.

Art. 9. *In what manner does the death of the brain produce the death of the lungs?* The author aſſerts, that the brain has no direct influence on the lungs, and death is imparted from the brain to the lungs through the medium of the diaphragm and the intercoſtal muſcles.

Art. 10. *In what manner does the death of the brain produce the death of the heart?* The brain has likewiſe no immediate influence on the heart; but this dies after the function of the lungs being deſtroyed, whence the death of the heart ariſes. The author avails himſelf

himſelf of the Galvanic experiments, in order to explain this difficult part of his ſyſtem, in which attempt he diſplays much ingénuity and acuteneſs.

ART. 11. *In what manner does the death of the brain produce the death of all organs?* The brain has no immediate influence on the functions of the organic life; but the death of the brain can only effect the death of the reſt of the animal organs by producing the death of different intermediate organs.

Ideas on the ganglia and the nervus ſympatheticus magnus. All organs, that receive their nerves from ganglia, are not ſubordinate to the action of the brain and to the will. The ſympathetic nerve conſiſts in a re-union of ſmall nervous ſyſtems, each of which has a ganglion as the central point, independent of one another, they anaſtomoſe with the medulla ſpinalis, and with each other. The nerves that ariſe from theſe ſmall ſyſtems, are not to be conſidered as dependent on the great ſyſtem of nerves which belong to animal life.

ART. 12. *In what manner does the death of the brain produce the general death?* As the death of the brain is not capable of directly deſtroying the functions of the inner life, the following ſucceſſion in the ceſſation of the general life takes place. 1. Senſibility and locomotion ceaſe. 2. Diaphragm and the intercoſtal muſcles become paralytic. 3. The mechaniſm of reſpiration is deſtroyed. 4. The chemical proceſs of the lungs ceaſes. 5. Black blood enters into the ſyſtem of red blood. 6. Circulation is obſtructed. 7. The heart dies, and the circulation entirely ceaſes. 8. The organic life, and, 9. The animal heat, are extinguiſhed. And, at laſt, 10. The white organs, as they are called, die, becauſe their nouriſhing fluids are almoſt entirely independent of the great circulation.

Ueber die verſchiedene Form, &c. i. e. On the different Form of the Os Intermaxillare in different Animals; by GOTTHELF FISCHER, Librarian at the Univerſity of Mentz. Leipſic, 1800. pp. 151, 8vo. with 3 plates.

THIS is an excellent work on a very important ſubject in Comparative Anatomy; and has additional intereſt, becauſe it gave riſe about two hundred years ago to ſome literary debates, the deciſion of which is equally intereſting both for anatomy and for the natural hiſtory of the human ſpecies. For though GALEN had mentioned in his Treatiſe on Oſteology, amongſt the bones of the ſkull, the intermaxillar bone, VESALIUS proved, however, that this was wanting in men, and that conſequently the work of Galen had not been compoſed after human bones; for which aſſertion the Galeniſts ſeverely expoſtulated with him. Mr. FISCHER having again examined this ſubject, aſſerts, likewiſe, that there is no trace of an intermaxillar bone in the human ſpecies, the rimula ſemilunaris having only a very diſtant analogy with it. He is alſo of opinion, that this bone exiſts in the reſt of Mammalia, and conſtitutes a chief difference from man. It is true, that there are ſeveral animals, in which it has not yet been diſcovered, as in the *Veſpertilio ferrum equinum*, *Sorex Arabicus*, and *Bradypus tridactylus*; but it is not

not improbable, that on account of its minuteneſs and ſlight coheſion with the ſkull, it has hitherto eſcaped obſervation.—The author determines the form and ſituation of this bone in general, and its general differences, the proportion it keeps to the foreteeth, &c. He relates farther the ſpecific differences in many animals, the ſkulls of which he had an opportunity of examining in the National Muſeum of Paris, &c. Mr. F. attributes likewiſe an intermaxillar bone to ſome birds, fiſhes, &c. The plates repreſent the intermaxillar bones of different exotic animals, fiſhes, &c. of which thoſe of the *Chætodon roſtratum* and Trigla volitans are particularly remarkable.

Critical Survey of the lateſt Theories of difficult Dentition.

[Concluded from No. XIX. pp. 269, 271.]

In medio Veritas!

After having ſtated the theory of Dr. WICHMANN on difficult dentition, by which he attempts to overthrow entirely the exiſtence of it, as a morbid phenomenon, we think it incumbent upon us to propoſe and diſcuſs what might and has been ſaid againſt this opinion, ſo diametrically oppoſite to common obſervation and experience. On this account we doubt not, but that by far the greateſt part of our readers will have been ſurpriſed at the paradoxical aſſertions of Dr. WICHMANN, and recapitulated in their minds the different contrary arguments, that either their own experience, or the obſervations and authority of medical writers, may ſuggeſt to them. It can be eaſily conceived, that in Germany alſo many antagoniſts have aroſe againſt the above theory, equally powerful in their arguments and authority as practitioners. However, though we are fully convinced, that many points in the opinion of Dr. WICHMANN, cannot be well admitted, as being contrary to impartial obſervation, yet we ought not to deny, that this great practitioner has occaſioned by his ideas, medical men to ſubmit ſuch an important ſubject to new examination, and to throw more light upon it, by drawing from experience practical reſults; in ſhort, to fix more accurately the limits of the cauſes of infantile diſeaſes than hitherto has been done.

It is certain, that hydrocephalus, ſcrophula, acor primarum viarum, &c. have been frequently overlooked; and the ſymptoms attending theſe morbid affections, falſely aſcribed to a difficult dentition, particularly as they in a great meaſure occur at the period of teething. However, on the other ſide, by adopting the ideas of Dr. WICHMANN, practitioners are unavoidably led to derive all morbid affections of the infantile age from an acor in the ſtomach, hydrocephalus, ſcrophula, &c. and by diſregarding entirely dentition, to incur the danger of not employing that mode of practice, which is properly indicated.

On the peruſal of Dr. WICHMANN's opinion, the chief point which he has premiſed to his other arguments is, undoubtedly, that the

the gums, or those parts, which by the irritation of a tooth breaking through, may excite pain, and by consensus, the rest of symptoms thought to attend difficult dentition, are by no means endued with such a degree of sensibility, capable of producing those affections; but that the gums, which, at the supposed want of a perioſtium, are the only parts to be irritated, are nearly deprived of all sensation, being a spongy, senseless substance. This assertion ought, therefore, to be first considered; and it deserves the first place among the arguments that have been brought forward against the above opinion.

1. *That the gums are really a very sensible and irritable part.*—No part of the body into which nerves do penetrate, can be said to want sensibility; and as the gums are undoubtedly provided with several nervous fibres, it ought to possess the perception of pain. Of the presence of nerves in that part, no particular mention is made by the author of the above theory; on the contrary, he seems to treat the expression of SAUVAGES, "*a compressione nervi*," with ridicule, and to pay to the nerves not that attention which they deserve. Every body, however, may persuade himself of the existence of nerves in the gums, by consulting the works of HALLER, SOEMMERING, MONRO, and particularly MECKEL, (*de quinto pare nervorum cerebri*, p. 63 and 96). The nerves that go to both these parts, originate from the fifth pair of the cerebral nerves, and are the following.—The ramus posterior, or minor of the nervus palatinus, sends two branches, one on each side, to the molar teeth of the maxilla superior, which again dividing themselves in two branches, extend to the foremost teeth, and emit fibres to the palate, and particularly to the gums. The ramus tertius of the palatinus, or of the alveolaris maxillæ superioris, separates in the dentatem posteriorem, emitting branches to the molar teeth, antrum Highmori and Orbita, and in the dentatem anteriorem maxillæ superioris, which provides the foreteeth, particularly the eye-teeth. The upper lip receives likewise nerves from these branches, which go to the orbita, and it is highly probable that they extend to the gums, though, on account of their subtility, they cannot be pursued by the knife. The third chief branch of the par quintum, or the nervus maxillaris inferior, proceeds, after having dispatched a few branches to the muscles of the os hyoides, to the canal of the maxilla inferior, and provides every alveolus with a nerve, and gives besides to every molar tooth a small additional branch. All the nerves of the fifth pair, and the portio dura of the 7th and the 9th pair, are combined by an anastomosis with the maxillaris inferior, whose third branch is distributed to the salival glands, muscles of the tongue, and to the gums.

2. *The history of the formation of the teeth, seems to prove the existence of difficult dentition.* The stamina of the teeth, surrounded by a vascular membrane, are situated in the alveoli, which, according to anatomists, have no opening before the teeth break through, some but closed with a long substance, and covered by the gums. At the advancing formation of the tooth, this is to make its way through

through the bony cover by its root that, while increasing, is supported by the basis of the alveolus pressing the head of the tooth against the cover of the alveolus, till yielding, it allows the tooth to pass by degrees. This is what they call the shooting of the teeth. The stronger and harder the cover is, and the more resistance it shows, the more the tooth presses the bottom of the alveolus, by which the nervous branches that go to the root are irritated, which particularly happens in the eye-teeth. From a pressure of these nerves, which have a very extensive sympathy, such vehement symptoms may arise as are recorded in the works of Bartholin, Tissot, &c. The tooth after having perforated the bony cover must pierce thro' a proper vascular membrane or periosteum, as we see from the works of Soemmering, who says, "that the head of the tooth having penetrated the periosteum appears bare, as the membrane only incloses those parts of the tooth that are covered by the gums, and lie in the alveolus (*On the structure of the human body*, T. 1. p. 207, in German). L. Heister calls this membrane, "Membranam vasculosa nerveam." The gums, through which the tooth is then to pass, are in all points connected to the periosteum of the jaws, which naturally increases the sympathy.

3. If we even suppose with Dr. Wichmann, that the gums are quite senseless, or at least provided with no particular degree of sensibility, that no periosteum exists, there is still no reason to assert, that those parts are equally deprived of sensibility during dentition. For it is a known fact, that parts possessed of little or no sensibility, as the bones and cartilages, receive a great perception of pain, or become painful in a morbid state, a circumstance which ought to be particularly regarded in this question.

4. *The state of the gums in teething children is frequently such as denotes the existence of an inflammation.* It is very obvious to observation, that the gums are in many cases extremely painful, and that children hardly bear the slightest touch without experiencing the most painful sensation. The inner parts of the mouth, and especially the gums, feel very hot, and cause a burning sensation in the finger. It has besides been mentioned, that, when the teeth have broke through, great pain is occasioned by the tension of two or three fleshy fibres happening to remain on the tooth, which being cut through, the pain immediately ceased. We find, however, that topical pains are denied by Dr. Wichmann to take place, though he admits at the same time, even in an easy dentition, a tickling and prurient sensation, which indeed differs only in degree from what we call pain, into which it may of course be changed under certain circumstances. There is undoubtedly a topical irritation in every dentition, which is proved by several other phenomena, as salivation, a continual effort of children to relieve themselves in a less degree of irritation by biting some hard substances, the greater force which they then apply in sucking, and other symptoms that are commonly observed. Dr. Wichmann thinks those cases rather anomalous, in which the inflammation even extends itself to the neighbouring parts; however, it ought to have proved to him, how liable those parts are to pass over from a slight degree of irritation to inflammation. It is likewise not uncommon, that

adults feel the moſt painful ſenſation at the appearance of the laſt tooth, dens ſapientiæ, and cannot ſuffer then the ſlighteſt touch on the upper part of the gums; hence it is probable, that in ſuch a tender age, when dentition takes place, ſimilar pains may be produced. The redneſs of the gums moſt frequently attends a difficult dentition, and though it does not always occur, it ſeems to prove, that the gums become inflamed by the irritation of the teeth cutting through, of which it is an additional ſymptom.

5. Dentition proceeds in two periods; in the firſt of which, that is properly called the ſhooting of the teeth, the tooth irritates the membrane in which it is incloſed, the ſides of the alveoli and the parts adjacent. No ſymptom of inflammation or ſwelling of the gums is perceived. In the ſecond period the tooth breaks through, ſometimes on a ſudden, and without any pain. In ſome inſtances, an interval takes place between theſe two periods, but frequently the formation of the tooth proceeds uninterrupted, till it appears in its natural ſize. According to this, two ſpecies of difficult dentition may be likewiſe admitted, the true and the ſpurious, the firſt of which originates in the perforation of the alveolus and in the irritation and preſſure of the neighbouring parts, the perioſtium, and the dental nerve, whence different nervous affections may ariſe without any ſwelling or redneſs being perceptible; in the ſecond ſpecies, which is more common, the gums are extended, ſwollen, and inflamed; and all the ſymptoms increaſe and become particularly urgent, when at the ſecond period of dentition, the preſſure of the nerve continues, or when the parts are irritated in this double way. Hence it may be explained, why the ſymptoms of dentitio difficilis were obſerved, without much ſwelling or inflammation of the gums, and why they often ceaſed when a ſwelling and redneſs of the gums were perceived, becauſe at the advancing growth of the tooth, the nerve and perioſtium were no more irritated, and the irritation of the gums alone not ſufficient to produce the ſymptoms that were perceived before this period.

6. With reſpect to ſalivation, a ſymptom that is often remarked at the period of teething, Dr. WICHMANN is more inclined to aſcribe it to aphthæ, and to a mere irritation of the ſalival glands, than to attribute it to dentition. We may however obſerve, that aphthæ are not always concomitant with this ſalivation, which, as it keeps pace with the act of teething, may be more juſtly thought to depend on the irritation of the teeth breaking through, that acts per conſenſum on the ſalival ſyſtem. This cauſe is at the ſame time ſo near at hand, that there is no reaſon to ſearch for another we know not.

Such are the arguments that may ſerve to prove the exiſtence of an irritation in the mouth at the period of dentition, ſufficient to produce topical ſyſtems of difficult teething. It remains now to be examined, whether the general ſymptoms that have been derived from difficult dentition are really owing to idiopathic affections, as aſſerted by Dr. WICHMANN. However, before we recur to that queſtion, we beg leave to obſerve, that none of theſe general ſymptoms

toms ought to be separately regarded; but that in order to be fully convinced whether any of them arise from the above cause, it will be the surest way to enquire into the other symptoms that attend dentition, and from the coexistence and coincidence of other symptoms, to conclude that they are caused by the irritation of the the teeth. We readily agree with Dr. WICHMANN, that some symptoms are owing to different causes, not depending on dentition, or may at least have been produced by them, and we are not willing to deprive this gentleman of the praise he merits, for having pointed out the true source of several symptoms, otherwise attributed to difficult dentition; but we cannot forbear to confess, that by utterly denying their origin from dentition, he has equally departed from truth. For, 1. Most of the general symptoms attending difficult dentition are phenomena of an affection of the nervous system, and symptoms of irritation and pain. How they are produced, appears from what we have above stated. Convulsions are accordingly excited by the re-action of the topical affection on the whole system of nerves, by which it suffers more or less, according to constitutional difference. It is, farther, not at all inconsistent with analogy and the laws of animal oeconomy, to derive some other symptoms which Dr. WICHMANN finds particularly absurd to ascribe to dentition, from a consensus of the topical irritation, viz. diarrhœa, strangury, &c. as we know, for instance, that the affection of the olfactory nerve by the smell of a medicine, that acts as a cathartic, produces the same effect in some persons as if they had swallowed it. A fever is likewise observed to attend some cases of dentition, owing also its origin to irritation.

2. It is remarkable that a very intimate connexion and concurrence of the period of teething, and the formation of the teeth, and of those general symptoms exist, which admit of no better explanation than to think them mutually depending on each other. The topical signs of dentition appear, and at the same time the general symptoms of it, keeping nearly pace with one another, as the last mostly discontinue as soon as the act of teething is performed. The observations and experience of the most respectable practitioners bear witness to this fact, which seems to have been not so much attended to as it deserves.

The incision is utterly rejected in this theory as an useless operation, for which assertion he appeals to some cases where it was undertaken without success, and to those practitioners who professed themselves antagonists to that operation. The success of it, however, depends on the time and the period of dentition when it is resorted to. According to our former statement of the two periods of dentition, it must naturally prove without avail when the tooth has not yet pierced through the alveolus, and service can accordingly be expected when the tooth begins to extend the gums; in which case it has been found extremely useful. To the authority of those physicians who reject it, we can oppose that of others who approved it, equalling those as well in number as in practical excellency.

excellency. Drake, Vesalius, Ettmuller, Underwood, Rosenstein, Ludwig, Fr. Hoffmann, Frank, Darwin, &c. think it an operation not only useful, but sometimes necessary, which they have performed with the best success.

Against the general reflections which Dr. Wichmann has subjoined, may be observed, that nature seems not to be, in any formation of parts, so precipitate as in the act of teething; and by her proceeding in the growth of other bones more gently, those affections are avoided which we remark in dentition, even when the nature and situation of these parts did admit of a similar irritation of the sensible and irritable fibre. It is by no means to be supposed, that dentition should be always attended with symptoms that render it difficult; but several circumstances must concur, in order to produce the above morbid state; and as at the period of approaching puberty and fluxus mensium the constitution may be affected by the change that is then experienced, this may likewise take place in that operation of nature. How easily the animal body is influenced by the act of teething, appears from the observations of naturalists, who have remarked that the brute creation suffer greatly by dentition; and it is related that many young animals, horses, lions, &c. fall a sacrifice to difficult dentition. When we do not perceive those symptoms in adults, suffering the severest tooth-ach, we should always recollect, that dentition of children proceeds in a tender age, where the irritability of the body is very great, and the consensus more extended than afterward.

This may suffice to shew, that dentition ought not to be exploded from the list of morbific causes, as Dr. Wichmann intended by his observations.

Mr. Whately, on Strictures in the Urethra.

(Concluded from p. 497—482 of our last.)

Mr. W. commences his own *method of treating Strictures in the Urethra, by the Caustic,* with the following observations and cautions, viz.

"Before entering on the particulars of my proposed method, it may not be improper to repeat, that it is essentially necessary, in our present imperfect acquaintance with the caustic, to endeavour to dilate all strictures of the urethra by means of common bougies, before any attempt be made with the caustic to effect their cure. Mr. Home, indeed, informs us, that this has been done in almost every instance adduced in favour of the caustic. As, however, even in the cases related by him, there are so many instances of serious effects produced by the caustic, it is highly necessary to enforce this rule; a rule which, I fear, is not very strictly observed by some practitioners.

"According to our present experience, I would confine the practice of applying this remedy altogether to such strictures of the urethra, as are either utterly impervious, or so contracted, as to be incapable of dilation by the common bougie: for the urethra, even in its healthy state, being tender and irritable, and

connected

connected with parts of great importance in the system, all violent remedies should be very cautiously applied to it.

" One of the objections made to the use of caustics, for removing strictures of the urethra, is the impracticability of confining their action to the constricted part. But, I must confess, I do not perceive the force of this objection; for I think, that they may be almost always applied to such part with great nicety. Wiseman, and other ancient surgeons, applied escharotics of different kinds, by means of adhesive plaister at the end of bougies, in order to remove obstructions and excrescences, which they supposed to exist in the urethra; the former likewise used a canula for the purpose of introducing a caustic. This practice, however, in consequence of the danger found to arise from it, was laid aside for near a hundred years; but was revived by Mr. Hunter, who, as remarked at the beginning of the former essay, introduced the lunar caustic to strictures of a certain description, at first through a canula, and afterwards by enclosing it in the end of a common bougie. Very lately, Dr. Sherwin has ingeniously proposed to remedy the inconveniences of the caustic bougie, by applying a certain quantity of the lunar caustic in powder, at the end of a warm whalebone bougie, to which it is to be fixed by adhesive plaister, or any other viscous substance. This method, however, does not appear sufficiently to secure the sides of the urethra from being injured by the caustic in its passage to the stricture; besides, there is danger of the plaister being detached from the whalebone, before it has reached the strictured part.

" About two months before I heard of Dr. Sherwin's proposal, I made several essays to discover a substance that would make the caustic adhere firmly to the bougie, and yet not hinder its dissolving on the constricted part. The following method will completely answer both these purposes: Touch an eighth, or from that to a quarter of an inch, of the end of a bougie of any size, with a small brush dipped in common glue, as used by mechanics; and let the coating of glue be as *thin as possible*. The glued end must be immediately applied to a given quantity of powdered lunar caustic, put upon a piece of writing paper; this should be done, by alternately putting its different sides to the caustic, until the whole of it adheres. The bougie in this state must be laid in some dry place to harden, which effect will take place in a few hours. When it is sufficiently hardened, the glued end must be gently rolled to and fro upon a table, with a bit of smooth wood, about four inches square, till it is perfectly level and smooth, If the bougie be very hard, or the weather cold, this end should be previously warmed a little by a fire. The part thus covered with caustic should then be very lightly rubbed with a bit of bees wax, with the intention of giving it a very thin coating of this substance. After this, let it be kept for use in a *glass vessel well closed*. The glue should be made of such a degree of consistence only, as will make the caustic adhere to the bougie, and become hard when exposed for a moderate time to a dry air. If it be made too stiff, it will be attended

attended with the inconvenience of requiring a longer time in being diſſolved, when applied to the conſtricted part; on this account too, the coating of wax ought to be as thin as poſſible.

" The advantages attending the cauſtic bougie prepared in this manner are obvious.

" In the firſt place, the bougie may be of any ſize; even the ſmalleſt ſize can, by this method, become the vehicle of this powerful remedy; and may be readily paſſed into, or a little beyond, ſuch ſtrictures as are extremely narrow; or ſuch as are attended with a conſiderable contraction of the oriſice of the urethra.

" Secondly. From the protection afforded by the wax coating, no part whatever of the cauſtic touches the ſides of the urethra in its paſſage to the ſtricture.

" Thirdly. A determinate quantity of the cauſtic may be applied with certainty.

" Fourthly The cauſtic cannot be ſeparated from the bougie.

" Fifthly. The cauſtic may be made to act on the whole ſurface of the ſtricture at each application.

" Sixthly. Where there are more ſtrictures than one, and it is thought advisable, to attend to one only at the firſt; the cauſtic may be directed, and confined in its action, to any particular ſtricture, upon which the practitioner may wiſh it to operate, in preference to the reſt.

" Seventhly. Fixing the cauſtic with glue has this additional recommendation; we can attach it with perfect ſafety to the extremity of a bougie, and thereby apply it with more certainty to an impervious ſtricture, than is practicable with the common armed bougie.

" When we have determined to uſe the cauſtic bougie thus prepared, the diſtance of the conſtricted part from the extremity of the penis ſhould be accurately meaſured, in order to apply it with certainty to this part only. This may be done with a common bougie. The exact ſize of the canal at the part ſhould likewiſe be aſcertained by the ſame inſtrument. This in general may be readily done. They who are uſed to paſs a bougie of a proper ſize through a ſtricture, can always tell when the point of this inſtrument is about to enter it. When it firſt touches the ſtricture, it generally ſtops; but on preſſing the bougie gently on, it evidently feels as if its point entered a paſſage, which embraces it on every ſide. The bougie paſſes on afterwards more or leſs freely, according to the ſize of its upper part, and the openneſs of the paſſage beyond the ſtricture.

" Having aſcertained theſe points, it will be proper to choose a bougie armed with cauſtic, in the manner already mentioned, of a ſize rather leſs than the conſtricted part. A piece of fine white thread ſhould then be tied round the bougie, at the exact diſtance of the ſtricture from the end of the penis, and another thread a quarter of an inch nearer the external end. By the firſt of theſe marks it will be known with great accuracy, when the bougie enters the conſtricted part; and the ſecond will determine how far it is puſhed beyond

beyond it. This armed bougie (previouſly oiled) may now be paſſed down to the ſtricture, and about the eighth of an inch into it, and continued in this ſituation from five to ten minutes, now and then alternately moving it forward and backward, about the eighth of an inch each way, in order to wipe off any mucus which may have collected upon the cauſtic, and to aſſiſt in wiping off the cauſtic itſelf. On withdrawing the bougie, all the cauſtic will be found to be diſſolved; whence we may fairly conclude, that it has been expended entirely on the conſtricted part.

"If the ſtricture be open enough to admit a bougie of a moderate ſize, ſuch a bougie, armed with cauſtic, may very readily be paſſed into it, or a little beyond it; but, if the ſtricture admit only a very fine bougie, and cannot be dilated ſo as to receive one of a larger ſize, great care ſhould be uſed in paſſing a cauſtic bougie of a ſmall ſize into the ſtricture. For if this ſhould not be effected, and its extremity be bent in endeavouring to puſh it forward, much effect cannot be expected from the cauſtic, as it will be diſſolved at a part of the canal anterior to the ſtricture. From what has been ſaid, it is evident, that the ſucceſs of applying the cauſtic by this method will depend very much upon the nice manner in which it is performed.

"With reſpect to the quantity of cauſtic which ought to be applied to a ſtricture, I am convinced, that, on the firſt trial, it ſhould in no caſe exceed one-twelfth part of a grain."

As Mr. Cartwright has propoſed a new method of applying the cauſtic in theſe caſes, and diſapproves of that recommended above, (See page 513) we ſhall take this occaſion to ſuggeſt a few obſervations on his plan.

The method which Mr. C. adopts of applying lunar cauſtic in powder to a ſtricture of the urethra, by means of the broader end of a common bougie introduced through a flexible gum canula, appears to us to be more uncertain in its effect than that which Mr. Hunter recommends of applying a bit of the ſame cauſtic in a port crayon through a flexible ſilver canula, or by means of his armed bougie now in uſe.

In the firſt place, as no means are employed to make the cauſtic adhere to the end of the bougie, the quantity of it actually applied to the ſtricture muſt be uncertain.

Secondly, The *flat* end of a bougie *cannot* be applied with certainty even to the anterior part of a ſtricture when it is much contracted, whereas the conical point of the cauſtic in the port crayon is well adapted to this purpoſe.

Thirdly, As it is not propoſed by this method, that the cauſtic bougie ſhould be paſſed into, or a little beyond the ſtricture, even in thoſe caſes which will admit a bougie of a middle ſize, much of the benefit to be expected from the uſe of the cauſtic will be loſt in applying it to the anterior part of the ſtricture only, as the liquefied cauſtic will flow anteriorly; for all fluids in the urethra flow towards the extremity of the penis by means of the muſcular action of its canal.

Fourthly,

Fourthly, The *flat* end of a bougie thus armed with cauſtic *cannot*, from its ſize, be paſſed into or through a very narrow ſtricture; and as the cauſtic is of more uſe in ſtrictures of this kind than in any others, it muſt be confined in its application to the anterior part of them only, which, as already obſerved, is an uncertain mode of applying it.

The objections which Mr. C. has made in his Poſtſcript to Mr. W's mode of applying the cauſtic in theſe caſes, do not appear to us well founded.

When the whole of the cauſtic fixed upon the end of a bougie by means of glue, is perfectly diſſolved and liquified upon a ſtrictured part of the urethra, it muſt of courſe immediately act upon that part, and if the bougie be ſuffered to remain upon the ſtricture until this effect takes place, (which, according to Mr. Whatley) requires to be done from 5 to 10 minutes) is it poſſible that the withdrawing a bougie thus *perfectly freed* from its cauſtic, along the ſound part of the urethra, can be an *inſuperable objection* to its uſe, and attended with *miſchievous conſequences?*

That the very extremity of a bougie, armed with cauſtic by means of glue, muſt be immerſed in the moiſture of the urethra, which diſſolves the cauſtic, is certainly true; but it is evident, that the very ſmall portion of liquid which adheres to it, muſt be wiped off the moment the bougie is attempted to be withdrawn. Beſides, were this an *inſuperable objection* to this mode of applying the cauſtic, it would be equally an *inſuperable objection* to the mode of applying it by the flat end of a bougie, as recommended by Mr. C. As ſuch an end would retain a portion of the liquified cauſtic upon its ſurface, more of it would alſo unavoidably adhere to the extremity of the canula; and when both were withdrawn, *miſchievous conſequences* muſt neceſſarily ariſe to the ſound part of the urethra, if ſuch conſequences enſue upon withdrawing the bougie after Mr. W's method of applying the cauſtic.

This powerful remedy may, indeed, be in a very trifling degree weakened by its admixture with the glue; but this appears to us to be even an advantage in ſome caſes, as leſs miſchief or pain may thereby enſue from its uſe in very irritable habits; and the activity of this application is ſuch, (if it be kept in a glaſs veſſel well cloſed, as directed by Mr. Whately) that the very ſmall quantity of thin glue with which it is mixed, cannot, one would ſuppoſe, prevent its acting with power on any ſurface to which it is applied, which appears to be proved by the caſes Mr. Whately has given; and whenever a greater effect is neceſſary, it would appear to be a very eaſy matter to make a little addition to the quantity, after it has been proved that the leſs quantities have not had the required effect.

As Mr. C's object is the improvement of his profeſſion, he will not be diſpleaſed at theſe hints, which we hope he will improve.

Dr.

Dr. Baeta's Comparative View, &c.

(Concluded from p. 388—391.)

" When the torpor from exhauſtion of ſenſorial power affects other parts of the ſyſtem, which have their actions aſſociated with thoſe of the ſtomach, as, for inſtance, the ſpleen, liver, &c. the ſtomach falls into a torpor, from defect of excitement of the ſenſorial power of aſſociation, and ſo the arterial ſyſtem, till a general torpor is formed, which conſtitutes the cold fit, (Sect. xvii). Now during the cold fit, an accumulation of ſenſorioal power of aſſociation takes place in the ſtomach, arterial ſyſtem, &c. which overbalances this defect of excitement of the ſenſorial power of aſſociation: conſequently, theſe parts are thrown into increaſed actions. This conſtitutes the hot fit, which, according to the accumulation of the ſenſorial power of aſſociation, and to the ſtimuli applied to it, will produce various effects (Princip. 4. and note *(n)* Princip. 15). Thus either theſe increaſed actions may be proper, to reduce the ſenſorial power of aſſociation, accumulated during the cold fit, to its juſt limits, and at the ſame time to affect, by means of aſſociate motions, (Princip. 5. and 8.) that part which is torpid from exhauſtion of ſenſorial power, ſo as to reſtore its juſt degree of deriving ſenſorial power from the brain and ſpinal marrow; and then the fever is cured: or theſe increaſed actions merely reduce the ſenſorial power of aſſociation to its natural ſtandard, while the ſpleen, liver, &c. remain yet in a torpid ſtate, which, either by its degree, or by the concurrence of other cauſes, may induce again the torpor of the ſtomach, &c. in conſequence of defect of excitement of the ſenſorial power of aſſociation. Hence various kinds of intermittent fevers, or theſe increaſed actions, may be in ſuch a degree, as to occaſion ſenſation. Hence inflammatory fevers (Princip. 15). Or laſtly, theſe increaſed actions may, in conſequence of their violence, produce a ſmaller, or greater, or complete exhauſtion of ſenſorial power, in ſome part eſſential to life. Hence various kinds of continued fever with arterial debility (Sect. xx, xxi, and xxii,) or even death (Princip. 15).

" From Sect. xvi.—xxiii. it will appear, that Dr. Darwin's Doctrine of Fever explains the various phenomena which take place in this diſeaſe: viz. it accounts 1ſt, for the formation of the cold fit, and decreaſed actions of the ſyſtem, which are obſervable in it (Sect. xvii.): 2dly, for the formation of the hot fit, &c. (Sect. xvii.): 3dly, for the phenomena which attend the hot fit of fevers with arterial ſtrength (Sect. xix. and xxiii.): 4thly, for the intermiſſion of fevers (Sect. xxiii.): 5thly, for the change from intermittent to continued fevers (Sect. xxii.): 6thly, for the phenomena which take place in ſome continued fevers with arterial debility; that is, the decreaſed actions of the ſtomach and arterial ſyſtem, as evinced by the want of appetite and weak pulſe; and for the increaſed actions of the capillaries, as evinced by the

increaſed heat (Sect. xx.): 7thly, for the abſence of the increaſed actions of the capillaries, in ſome fevers with arterial debility, as evinced by the abſence of increaſed heat over the body (Sect. xxi.): Laſtly, for the long duration of continued fever with arterial debility (Sect. xxviii.). See the foregoing caſes.

"From the ſame doctrine of fever the moſt proper indications of cure are deduced.—1ſt, According to it, we muſt excite the ſyſtem in the cold fit of fevers, taking care, however, to proportion the ſtimuli to the ſenſorial power already accumulated. By theſe means we prevent the accumulation of ſenſorial power, which may give riſe either to the hot fit (Sect. xvii.), or to inflammation, &c. (Sect. xxiii.) Hence Dr. Darwin's expreſſion (Zoonomia, vol. i. Sect. 12.) "The true means of curing fever "(with ſtrong pulſe) muſt be ſuch as decreaſe the action of the "ſyſtem in the hot fit, and increaſe it in the cold fit."

"2dly. According to the ſame doctrine, during the hot fit of fevers with arterial ſtrength, we are led to diminiſh the increaſed action of the ſyſtem; ſince by this means we prevent the inflammation, which may ariſe during the hot fit in conſequence of theſe increaſed actions, and various other diſorders (Sect. xxiii.). Hence Dr. Darwin ſays (Zoonomia, vol. ii. Supl. 1, 16, 9.). "The cure "of fever with ſtrong pulſe (in the hot fit) conſiſts in the re-"peated uſe of veneſection, gentle cathartics, diluents, &c."

"3dly. According to the ſame theory, it appears, that the cure of fevers with arterial debility and increaſed actions of the capillaries (Sect. xx.) conſiſts in reſtoring the energy of the ſtomach and arterial ſyſtem, and in decreaſing the morbid increaſed actions of the capillaries. The firſt of theſe is obtained, by exciting into action the torpid ſtomach (and conſequently the arterial ſyſtem) either directly as by wine, opium, bark, &c. and food in ſmall repeated quantities; by ſlight electric ſhocks paſſed through it; by fomentations with water, heated to 96 or a 100 degrees of Fahrenheit's thermometer; by exciting its power of aſſociation with other parts of the ſyſtem, as by a bliſter, or indirectly, as by the exhibition of emetics, or iced water, &c. Hence the remarkably good effects of wine, bark, emetics, &c. in the foregoing caſes of fever, chiefly in that of R. Fcemiſton, under Dr. Hope's care. The ſecond of theſe indications is obtained by free admiſſion of cold air, and chiefly by the ablution with, or affuſion of cold water over the ſurface. Hence the manifeſt utility of the affuſion with cold water, ordered by Dr. Gregory in the foregoing caſes, and likewiſe of the affuſion of cold water, ſo much recommended by Dr. Currie. When theſe two means, viz. the invigorating the actions of the ſtomach, &c. by ſmall repeated doſes of ſtimuli, and the weakening the energetic actions of the capillaries of the ſkin, by ablution with or affuſion of cold water, are uſed conjointly, they are found to be of the greateſt utility in the cure of fevers of this kind.

"Laſtly, from Dr. Darwin's doctrine, it appears, that in fevers, with arterial debility and decreaſed actions of the capillaries (Sect. xxi.)

xxi.) the cure consists in restoring the energy of the system, but particularly of the secerning vessels of the brain. Hence all those substances which may have the power of exciting these vessels, will be useful in this kind of fevers. Opium and wine are supposed by Dr. Darwin to possess this power (Zoonomia, vol. ii. Supl. 1, 16, 9). In this kind of fever Dr. Darwin recommends also hot fomentations to the head, small electric shocks passed through it, and small blisters. Might not the warm bath be used with utility in these fevers? The respiration of oxygen gas, diluted with atmospheric air (says Dr. Darwin), would be useful in such fevers (Zoonomia, vol. ii. Supl. 1, 11, 7.). Might not this remedy, when well managed, be found useful in those fevers which may arise from the exhaustion of the sensorial power of irritation in the arterial system? (See Sect. xxii.). The utility of inspiring oxygen gas, diluted with atmospheric air, in fevers with arterial debility, is related by Dr. Thornton (see Dr. Beddoes's Considerations on the Medical Powers of factitious airs, part iv. and v. p. 135.).

"From the explanation given, Sect. ii.—vii. it is, I think, evident;—1st. That by means of Dr. Cullen's doctrine of fever we cannot account for the phenomena which take place in this disease. —2dly. That from this doctrine we cannot draw any proper indication of cure in it. Likewise from what is contained in Sect ix.—xv. it will appear,—1st. That Dr. Brown's Theory of Fever does not account either for certain phenomena, which are observable in the hot fit of intermittent fevers, or for the increased heat over the body in some continued fevers with arterial debility—2dly. That from this doctrine we cannot draw what may be called a complete indication of cure in fevers. For it always rejects a remedy, which is sometimes useful; and uniformly recommends one, which is at times, or generally, noxious in the hot fit of intermittent fevers:—And lastly, it always rejects one of the most useful remedies in the cure of some continued fevers with arterial debility; and also of intermittent fevers, when used during the hot fit, when the heat of the body is above the natural standard, &c. But from the account given Sect. xvi.—xxiii. as mentioned Sect. xxiv.—xxviii. it is manifest, that Dr. Darwin's Theory of Fever—1st. Accounts for the various phenomena observable in this disease—2dly. Affords the most proper indications of cure in it; and at the same time explains the operation of the remedies, by which these indications are fulfilled.

Mr. Charles Bell's System of Dissections.

[Continued from Numb. xxvi. p. 376.]

We are glad of an opportunity of giving a few more observations on, and extracts from, this instructive and useful guide to the student of Anatomy and Surgery; being well convinced that one or two courses of dissection, prosecuted with the care and patience requisite for the task, would not only give the student considerable practical anatomical knowledge, but make him also a competent

judge of the various diſeaſed appearances he will frequently meet with on opening dead bodies.

After a nice deſcription of the mode of diſſecting the abdominal muſcles, the *linea alba*, the *linea ſemilunaris*, &c. the Author gives the following judicious directions on Hernia, Dropſy, and Aſcites, diſeaſes as connected with the anatomy of theſe muſcles.

" It is wrong to cut acroſs the belly in opening collections of matter amongſt theſe muſcles, unleſs they have been deſtroyed by the matter; becauſe the fibres of the muſcles are then cut acroſs, hence they retract, and form a gap; and at the ſame time the poſſibility is increaſed of wounding the epigaſtric artery which runs up the belly. By opening theſe abſceſſes with an inciſion parallel to the fibres of the muſcles, the parts are divided, without allowing the muſcles to retract; and the chance of wounding the arteries is leſſened. In tapping for the dropſy, it is ſaid that the epigaſtric artery (the courſe of which I have marked in the plate with a dotted line), is ſometimes wounded, or its accompanying vein. But it ſhould be expected, when theſe were wounded, that while the canula remained in the wound, diſtending the orifice, they ſhould not bleed. If they ſhould bleed, however, they may probably be ſtopped by preſſing the canula obliquely to one ſide. I have never ſeen an accident of this kind; but ſuch caſes have been deſcribed to me, where the deluge of waters was coagulated in the tub. Perhaps an enlarged ſpleen, or ſome of the viſcera touched with the trochar, may ſometimes account for ſuch a bleeding."

The Author's directions for the mode of opening the abdomen, to inveſtigate the ſeat of diſeaſe, are clear and ſimple. Theſe are the ſtages: " Make a crucial inciſion, at once laying open the viſcera—or, if in a female, make your inciſion ſo as to leave a triangular flap to fall over the parts of generation, by continuing your longitudinal cut no further than the umbilicus, and from that point, making an oblique inciſion on each ſide, towards the projecting point of the ilium, forming thus three triangular flaps. Then obſerve whether the parts are in their natural ſituation: examine the omentum, the ſtomach, the ſpleen, the inteſtines, and then the liver and gall ducts. Then ſeparating the ſtomach and colon, connected by the omentum, raiſe the ſtomach, and examine the pancreas—Cutting up the adipoſe membrane, examine the kidneys, by making a ſection of them. Then following the ureters, examine the contents of the pelvis, &c. In making up your caſe, firſt mark the general deviations from the healthy appearance of the viſcera; then detail the hiſtory of the diſeaſe, and take notice of any anomalous appearances which ſeem unconnected with the principal diſeaſe.

" On this ſubject (Diſeaſe of the Abdominal Viſcera) it is of importance to ſtudy the nature of inflammation, of adheſions, and ſuppuration, and the almoſt uniform conſequence of diſeaſe upon the peritoneum. It will be eaſy, when this knowledge is acquired, to unravel the diſeaſed viſcera, which, without it, muſt appear confuſed and intricate.

" Active

"Active inflammation ſhould be diſtinguiſhed from turgidity of the veſſels; for often a fullneſs of the veins, mechanically produced, is deſcribed as an active inflammation in the brain and in the pleura, and ſtill oftener in the abdomen. In dropſy, in violent diſtenſion of the inteſtines, in tympanites inteſtinalis, and after child-bearing, the veins of the inteſtines and peritoneum are often found diſtended with blood. But in real inflammation, the peritoneum becomes thickened, pulpy, and leſs tranſparent—the blood is alſo of a brighter red colour; a circumſtance which ſeems not to be owing to a peculiar property in the inflamed part, of preſerving the arterial colour of the blood (as Mr. Hunter ſuggeſts), but to its more general ſuffuſion.

"As the eye becomes dry and painful and inflamed when the eye-lids are forcibly kept open and prevented from ſpreading the ſecretion upon its ſurface; ſo, when the enveloping membrane of the viſcera is expoſed, the natural ſecretion of its ſurface is deſtroyed, and it is irritated and inflamed. Or, by inflammation from any other cauſe, the ſecretion is deſtroyed; the parts lying in contact are no longer kept ſeparate; they mutually affect each other; and producing a new action, unite.

"Adheſions are produced in the peritoneum and inteſtines in a wonderfully ſhort time; and the ſmooth membrane, when it is torn from its new connections, appears cellular; or, upon being cut, thickened, and ſolid—or if the ſurface have undergone ſevere inflammation (without being allowed to form theſe adheſions which are ſo frequently the conſequence of inflamed peritoneum), its ſurface becomes ragged, and numerous floculi of new membranes are formed upon it.

"In diſeaſes where inflammation has ſpread among the viſcera, it is generally underſtood that the peritoneum is the original ſeat of the inflammation.—And according to this view of the ſubject, it appears upon diſſection, that the inteſtines do more readily than the muſcles participate in the inflammation of the peritoneum. The muſcles are indeed guarded in ſome meaſure by the looſe cellular ſubſtance, which ſeparates them from the peritoneum. But this does not ſatisfactorily account for what in the above view appears to be ſo great a difference between the ſympathy of the inteſtines and that of the muſcles with the peritoneum. The true explanation ſeems to be, that the diſeaſe or inflammation is in general communicated, not from the peritoneum to the inteſtines, but from the inteſtines to the peritoneum.—It is the diſeaſe of the inteſtines which produces thoſe deadly ſymptoms that are ſaid to mark inflammation of the abdominal cavity; and although there are diſeaſes in which the peritoneum is peculiarly the ſeat of inflammation; yet the inflammation of the peritoneum, produced by any external cauſe, is dangerous only by propagating its inflammation to the inteſtines."

The Author's obſervations on the *ſtomach*, *duodenum*, and *liver*, are ſo important, that we ſhall give them at length in our next Number.

A Letter

A Letter to Dr. Percival on the Prevention of infectious Fevers, and an Addreſs to the College of Phyſicians at Philadelphia on the Prevention of the American Peſtilence. By JOHN HAYGARTH, M. D. &c. 8vo. pp. 188. London, 1801. Cadell and Davies.

THIS truly philoſophical and philantrophic work will doubtleſs be read by every friend of humanity, and the medical profeſſion. Short extracts would convey no adequate idea of its merits; and long ones are inconſiſtent with our plan; we muſt therefore refer our readers to the book itſelf.

Inſtructions relative to Self-preſervation during the Prevalence of contagious Diſeaſes. By a Phyſician. 8vo. pp. 14, price 6d. London, 1801. Seely, Callow, &c.

IN the *Advertiſement* prefixed to this ſhort Pamphlet, the Author obſerves, that "Contagious and malignant Fevers have of late prevailed, and ſtill continue to prevail, to an unuſual extent, in the metropolis and other parts of the kingdom. The contagion is, unknowingly, carried from place to place by numbers; who, if they were made acquainted with the neceſſary precautions and directions, would ceaſe to be the propagators of infection, and would be enabled to nip the evil, whether in themſelves or others, in the bud.

"This is a ſubject which concerns perſons of every deſcription, but more eſpecially the heads of families and proprietors of ſchools. It has attracted the notice, and repeatedly employed the pen, of Dr. Haygarth, and other able and philanthropic phyſicians; but none of theſe gentlemen appear to us to have treated this ſubject upon a plan adapted to the uſe of the better claſs of houſekeepers; —a plan which we have attempted in the following pages.

"P. S. While this pamphlet has been printing, a new performance has appeared, from the pen of Dr. Haygarth, entitled '*A Letter to Dr. Percival, on the Prevention of Infectious Fevers, read to the Literary and Philoſophical Society of Bath*;' but as this Treatiſe, which exhibits ſo fine a ſpecimen of patient reſearch and juſt reaſoning, will, it is probable, be read only by thoſe who belong to the medical profeſſion; it will not ſuperſede the neceſſity of a ſet of inſtructions deſigned, like the preſent, for the uſe of the community at large."

In this plain and uſeful work the following ſubjects are conſidered, viz.

"What is meant by a contagious fever. When it occurs in a family, what precautions ſhould be obſerved by the nurſes and attendants; by the relatives; by viſitors. Of the proper regimen and diet, during the prevalence of contagious diſeaſes. Of certain reputed preſervatives. Of the management of the ſick-room."

MEDICAL

MEDICAL AND PHYSICAL INTELLIGENCE.

[FOREIGN AND DOMESTIC.]

On the illumination of rotten wood.—The illumination of rotten wood has been of late a ſubject of enquiry and diſcuſſion amongſt naturaliſts. The late *Mr. Spallanzani* maintains, that there is a perfect analogy between the illumination of rotten wood and the artificial phoſphorus, and he imagines, that by the putrid fermentation, the hydrogen and the carbon of the wood come more eaſily in contact with the oxygen of the atmoſphere; by which combination, a ſlow combuſtion and illumination are produced, and he at the ſame time thinks, that this proceſs cannot proceed in the irreſpirable kinds of gaſſes. Rotten wood alſo, in which the neceſſary quantity of hydrogen and carbon is not at the ſame time diſengaged, does not obtain the property of illuminating. *Mr. Corradori*, however, objects to this theory, that a ſlow combuſtion cannot well take place, as the wood, at the time when it begins to illuminate, is moſtly deprived of its reſinous particles, containing, conſequently, but very little hydrogen and carbon; and it appears to him very probable, that the more it loſes of combuſtible matter, the more it obtains the property of illuminating. There is, in ſhort, he ſays, a very great difference between this natural and the artificial phoſphorus.—*Mr. Humboldt*, whoſe experiments we have already mentioned, concludes from them, that the illumination of rotten wood takes place only when it gets in contact with oxygen; and when it has loſt the property of emitting light in irreſpirable gaſſes, it recovers it again by expoſing it to oxygen gas. *Dr. Gaertner*, however, is of opinion, that, according to his experiments, a certain degree of humidity is always requiſite, and he thinks that oxygen gas is not quite neceſſary, though the illumination is increaſed by it. This phenomenon, however, being very different from all known proceſſes of combuſtion, where light is diſengaged, *Dr. G.* aſks, whether the illumination of the wood does not more agree with the animal proceſs of reſpiration than with a true combuſtion? or, whether it is produced by phoſphorus and carbon, in a proportion hitherto unknown? *Dr. G.* is, on the whole, inclined to think, that it is at preſent impoſſible to give a ſatisfactory explanation of the phenomena that occur in this proceſs. *Mr. Boeckmann* has made numerous experiments and obſervations on the illumination of rotten wood in different gaſſes and fluids, in order to throw ſome light on the ideas of the above naturaliſts. The reſults of theſe experiments differ in ſome points from what the experiments of thoſe gentlemen have ſhown, which circumſtance, however, *Mr. Boeckmann* attributes to the nature of rotten

rotten wood, as a ſubſtance that is not always of the ſame kind, and has not always an equal degree of putrefaction and humidity. It ſeems to differ likewiſe materially from the artificial phoſphorus by the following diagnoſtics.

1. It ſhines in oxygen gas, at a very low temperature.
2. It emits light in all reſpirable gaſſes, at leaſt for a ſhort time.
3. In muriatic gas its light is ſuddenly extinguiſhed.
4. It ſhines with a leſs degree in air rariſied by the air pump.
5. According to the experiments of *Mr. Corradori*, it even ſhines in the toricellian vacuum.
6. Its illumination is extinguiſhed in oxygen gas as well as in other kinds of irreſpirable gaſſes, when they are heated.
7. By its illumination in oxygen gas, carbonic gas is produced.
8. One may ſuffer the rotten wood to be extinguiſhed ſeveral times, one after another, in irreſpirable gaſſes, without depriving them of the property of making a new piece of luminous wood ſhine again for a ſhort time.
9. Humidity greatly promotes the illumination, and ſeems even to be neceſſary in producing it.
10. The rotten wood continues to ſhine under water, oil and other fluids, and in ſome of them its light is even increaſed.

All this ſeems to ſhow, that the extinction of the rotten wood in different media, does not immediately depend on a want of oxygen, but rather on a particular change to which the wood itſelf has been expoſed.

Dr. Kurzwig, of Riga, relates the hiſtory of a ſucceſsful Cæſarean operation, by which a dead child was extracted. The pelvis of the woman, on whom the operation was performed, meaſured only two inches in its ſmalleſt diameter. She had been in labour for above three days. As the child offered no reſiſtance for uſing the perforatorium, and as there was no poſſibility of applying the forceps, the Cæſarean ſection was thought neceſſary, in order to deliver the woman. The firſt inciſion was made in the linea alba, to the extent of eight inches; the loſs of blood was inconſiderable. A correſponding inciſion being now made in the uterus, which was hardly one line thick, the back of the child appeared; that was already putrid. The funiculus umbilicalis was cut through without much loſs of blood. The uterus contracted itſelf very faſt, particularly round the placenta, which on that account was taken out with much difficulty. The application of the future cauſed much pain to the patient. In the courſe of three months ſhe was entirely cured, and all the ſymptoms, during this period, had been very ſlight. On the ſeventh day after the operation, a piece of the omentum ſeparated, that was incarcerated in the lower part of the wound.

Another caſe of Cæſarean operation, which though performed under the moſt happy appearances proved fatal, is related by *Dr. Klein*, of

of Stuttgard. The pelvis of the woman was extremely diſtorted, and the child living. The inciſion in the abdomen was made on the right ſide, at a diſtance of two inches from the umbilicus, in an oblique direction towards the axis of the pelvis, becauſe the uterus, by contracting itſelf, became ſo inverted, that its internal ſurface was quite turned outwardly. The woman died four days after the operation. *Dr. Klein* ſtates, that of 116 caſes of the Cæſarean operation, which he found related, 90 were attended with ſucceſsful iſſue, whereas 26 proved mortal. It is however remarkable, that there are more fatal caſes mentioned in modern times, where the operation leſs frequently occurred, than from the year 1500 till 1769, when 6 mortal, and 76 ſucceſsful caſes are recorded. This, *Dr. Klein* ſeems inclined to aſcribe to the mode of treatment, which, according to him, ought to conſiſt of gentle purgatives, that do not weaken the conſtitution, and of cold ſtrengthening fomentations on the belly.

In addition to the above two caſes, Profeſſor *Loder*, of Jena, conſiders the Cæſarean operation by no means ſo difficult and dangerous as has been thought, as it is not attended with much pain, nor requires any particular art and dexterity. He is of opinion that, generally, a fatal termination enſued when it was undertaken too late, a circumſtance which may more eaſily occur when ſuch patient is attended by any great accoucheur, whoſe ſkill induces him to try other expedients which his art affords him, before he determines to undertake the Cæſarean operation. On the whole, Profeſſor *Loder* adviſes to make the inciſion in the linea alba.

Dr. Wantzel has made ſeveral remarks reſpecting *Mr. Home's* account of an orifice in the retina of the eye. (*Philoſophical Tranſactions*, 1798, P. II.), of which the reſults are the following. The conical tube in the vicinity of the optic nerve, which Mr. *Home* diſcovered in the eyes of a ſheep and a bullock; he likewiſe obſerved and found it indicated by ſome old anatomiſts, viz. *Brigg* ophthalmographia, ſive oculi ejuſque partium deſcriptio anatomica, Cantabrigiæ, 1676, p. 28. fig. 2. S. No. 11; *Winſlow*, Expoſition anatomique de la ſtructure du corps humain, Paris, 1732. Traité de la téte, No. 223; *Haller*, Comment. ad Boerhaavii prælect. eadem. v. iv. § 525. not. d. Element. Phyſiologiæ, corp. hum. T. v. p. 383; *Heiſter* anatomie avec des eſſais de phyſique, &c. Paris, 1735. p. 693. 1. It exiſts probably only in young animals, and is loſt when they grow older.—2. It is no lymphatic veſſel, but merely an eminence projected from the retina.—3. The canal which comes forth from this tube, as is to be obſerved in the calf's eye, and extends to the lens cryſtallina, going through another canal formed by the hyaloidea, may be traced in children, rabbits, hares, cats, &c.—4. This veſſel ſeems to be nothing but the arteria centralis.—5. The central artery does not, at leaſt in horſes and calves, enter into the eye by the ſame way with the vena centralis through the middle of the optic nerve, but on the outſide of it; and in the calf, through an aperture in the

conic eminence of the retina.—6. *Dr. Wantzel* discovered, at some distance from the insertion of the optic nerve, a similar aperture in the retina of a horse, as Mr. Soemmering had seen in the human eye. This aperture has likewise an oval form, and is inclosed by two vessels; whereas the orifice in the human eye is surrounded with a thick margin.—7. The adhesion of the vitreous humour to the spot where the aperture is found, as observed by Mr. *Home* in men and a monkey, seems to arise from the central artery penetrating into the eye And thus we may conclude from analogy, that also in men and monkeys the central artery perforates the retina in a place different from that, whence the vena centralis penetrates into the eye, and that consequently there ought to be in the retina, besides the aperture which was already known to the ancients under the name of porus, another, viz. the orifice discovered by Mr. *Soemmering*.—8. The plait may have been occasioned in adults by the pressure and adhesion of the vitreous humour to that spot. It seems, however, not improbable, that also in men, at the first periods of life, the central artery penetrates a protuberance of the retina, which is lost when the vessel contracts itself by degrees.—9. The yellow spot is nothing but a phenomenon rising only after death, and seems not to differ from any other ecchymosis. Similar spots have been also observed by Dr. *Wantzel* in the lens crystallina of two horses, that became blind from a previous inflammation of the eyes, by which blood was brought into the smallest and finest vessels. The constant appearance of that yellow spot seems to depend on the vessels which surround the above orifice.

Dr. Golis, physician to the institution for infantile diseases at Vienna, states, in an account of the diseases which occurred in this institution, that among different affections to which the infantile age is exposed, 7 children had been seized by what he stiles the *blue fever*, of which 6 recovered and 1 died. This morbid affection, which *Dr. Golis* did not find to be any where mentioned, attacks children, particularly from the age of 4 months to one year; without any evident cause, and without losing their natural vivacity, or without shewing any sense of pain, they begin to grow blue over the whole body; the natural heat decreases, the pulse becomes slow and weak, a great lassitude is perceived in all their motions, the eyes lose their brightness and become languid, and are always fixed on one spot; the breath gets cold, the respiration quick and short, is often imperceptible, and re-commences with a deep sigh. On a sudden they cry with a particular voice, bending themselves, and their countenance expresses marks of the most violent pain. This lasts only a few minutes, but recurs again in a short space, being, at the same time, attended with a voracious appetite and an insatiable thirst. Their stools are white and hard; but a few hours before death, they become watery: the urine is without colour, and evacuated with preternatural copiousness; the skin soft, but clammy and cold. In the progress of the disease, they grow weaker by degrees, they cease to cry or give signs of pain, and die in a stupor, if medical assistance has been neglected in the beginning.

Mr.

Mr. NEMNICH, of Hamburg, will ſhortly publiſh a complete Noſological Dictionary, in which the denominations of all the infirmities and diſeaſes of the human body, in the Latin, German, Engliſh, French, Italian, Spaniſh, and Portugueſe languages, are contained. It is to conſiſt of two parts, in the firſt of which the Latin terminology will be given, and in the ſecond, the dictionary of the above langugages, relating to diſeaſes, with a Latin explanation; price one ducat.

Mr. GIRAULT praiſes the good effect of warm muriatic baths in arthritic complaints. He ſuffered himſelf a very obſtinate gout, againſt which, he uſed the warm ſaline baths at Pyrmont, during ſix weeks, with ſuch ſucceſs, that he felt himſelf greatly relieved after the fifth bath; and by degrees the ſwellings of the joints diſappeared, the limbs recovered their former activity, and the whole conſtitution was remarkably improved.

Profeſſor Rooſe, of Brunſwick, in a ſmall pamphlet, has made ſeveral remarks on the corpora lutea in the ovarium of women, on which particularly two modern authors, Dr *Haighton* and *Brugnoni*, have lately given their opinions, which in many points eſſentially differ from each other. The former agrees with *Regnar de Graaf* and *Haller*, that the preſence of the corpora lutea is an unqueſtionable proof of fecundation having taken place. The latter, however, thinks this opinion to be erroneous, maintaining that theſe bodies, which are remarked at the time of puberty, ought only to be conſidered as one of the ſeveral phenomena that indicate this period. *Profeſſor Rooſe* gives his reaſons, why he believes both phyſiologiſts to be equally wrong in their aſſertions; and he ſtates, 1. That it is an erroneous opinion to take the corpora lutea for *infallible* ſigns of previous conception or fecundation. 2. That it is improper to conſider them merely as marks of maturity, and the faculty of propagation in the other ſex. 3. That it is highly probable, theſe bodies might be formed, not only by fecundation, but alſo by a laſcivious imagination, and a topical irritation of the genitals.

Dr. Thilow, of Erfurt, has made ſeveral Galvanic experiments with ſaltpetre (nitrum), in order to ſhew, that it has a debilitating effect upon the nervous and muſcular fibre. On the crural nerve of a frog, nitre was applied, but without producing the leaſt convulſive motions, which, however, were immediately excited when it was touched with common ſalt. The lively motion of the heart of a frog was immediately ſtopped by a little nitre being ſcattered upon it.

The Pneumalkali, which was deſcribed by Dr. *Harhnemann*, as a new ſalt in *Crell's* Chemical Annals, from which we have given an extract in this Journal, and that ſold at the enormous price of 16 Louis d'ors a pound, is, according to the lateſt reſearches of Prof.

Tromsdorf and *Klaproth*, nothing else but mere borax. *Professor Tromsdorf* very justly reproves Dr. Hahnemann for having attempted to impose upon the public with a degree of confidence that equals the impudence of the grossest quack, as it is hardly probable Dr. H. should have been so ignorant, as not to know its being really nothing but borax. How little, in future, is to be relied on the authority of Dr. H. we may hence easily conclude; and he certainly deserves to lose the credit of the public, which he gained by his former merit, but which he has of late so frequently misused.

In *Hufeland's* Practical Journal, we find an ointment of manganese finely powdered, and suet, very much recommended in scabies, and it would be worth while to try it by farther experiments.

It is well known that the manner in which elephants couple has been hitherto unknown. By the diligent observations of *Mr. Corse*, made in *Tiperah*, a province of Bengal, it is ascertained that the elephants not only couple after the same way as stallions, but that, with a proper nourishment, they will propagate even in captivity. By the same experiments it is found, that the female elephant carries her young about twenty months.

To the Editors of the Medical and Physical Journal.

Gentlemen,

According to annual custom I have transmitted to you the Prize Questions for the present year. I am, &c.

Physical Society, Medical Theatre, Guy's Hospital, April 27, 1801. G. JOHNSON, Secretary.

Medical Question.

What is the nature of the disease called the Yellow Fever? and what is the best method of treating it?

Surgical Question.

What is the cause of the inflammation which succeeds wounds made into cavities, and what is the best mode of obviating the effects which they produce?

The successful candidate for the prize, in answer to the question (Are there any substances in Nature which act directly as sedatives on the human body?) proposed last year, was Mr. W. A Daingerfield, of Virginia, North America.

PRIZE QUESTION for 1801.

The Royal Medical Society of Edinburgh propose for the Subject of their Prize-Question, a series of experiments on the evolution of the Chick; and recommend the candidates for the prize, to direct their attention particularly to the following inquiries:

In what kinds of air can the proceſs of evolution go on to maturity?

What changes in theſe airs accompany the proceſs of evolution?

How much and what parts of the ſhell may be covered with varniſh, without preventing the evolution of the Chick?

Has any kind of air the power to accelerate or to retard the proceſs of evolution?

At what period of the evolution do the airs, unfit to ſupport that proceſs, prove moſt ſpeedily and moſt irreparably injurious to the Chick?

Regulations relative to the Prize-Queſtion.

1. That a Medal, or a Set of Books (at the option of the ſucceſsful candidate) of five guineas value, be given annually to the author of the beſt Diſſertation on an experimental ſubject propoſed by the Medical Society; for which all the members, Honorary, Extraordinary and Ordinary, ſhall *alone* be invited as candidates.

2. The Diſſertations are to be written in Engliſh or French, and to be delivered to the Secretary on or before the 31ſt of December in the year ſpecified, and the adjudication of the prize ſhall take place in the laſt week of February following.

3. To each Diſſertation ſhall be prefixed a motto, and that motto is to be written on the outſide of a ſealed packet, containing the name and addreſs of the author.—No Diſſertation can be received with the author's name affixed; and all Diſſertations, except the ſucceſsful one, will be returned, if deſired, with the ſealed packet, unopened.

Edinburgh, May 19th, 1801.

On the Prevention of Contagious Fever among the Poor.

We have great pleaſure in laying before our readers an account of the meaſures which have been adopted for forming an inſtitution to prevent the progreſs of the contagious fever among the Poor of the metropolis.

The Society for bettering the condition of the Poor, ever attentive to the great object of their aſſociation, having requeſted the opinion of the Faculty on the ſubject, and having received a ſtatement, ſigned by many of the moſt reſpectable phyſicians to Hoſpitals and Diſpenſaries, appointed a meeting on the 11ſt of May to take meaſures for forming the Inſtitution.

The attendance at this meeting was ſuch as might have been expected. The Biſhop of Durham was requeſted to take the chair, and the certificate from the Phyſicians having been read,

Lord Sheffield ſaid, that after what the meeting had juſt heard, it was not neceſſary for him to detain them with many obſervations. He believed there could be but one opinion as to the importance of the ſubject to which that paper alluded, and he therefore truſted that the reſolutions which it was his intention to propoſe would meet the unanimous approbation of the meeting. In the firſt place, he wiſhed to ſtate the grounds on which would be founded the

the meaſures hereafter to be adopted; and he did not know that this could be done more effectually than by reciting the ſubſtance of the certificate. His Lordſhip, therefore, moved, as the firſt reſolution,

"That it appears to this meeting, by a certificate from the Phyſicians of the hoſpitals and diſpenſaries in London, that the CONTAGIOUS MALIGNANT FEVER has been for ſome time paſt, and now is, prevalent in the metropolis;—and that it has been occaſioned BY INDIVIDUAL INFECTION, which, with proper care, might have been immediately checked—or has been produced, or renewed, by the dwellings of the Poor not having been properly cleanſed and purified from contagion, after the fever has been prevalent in them: — That it alſo appears that this evil *(the injury and danger of which extend to every part of the metropolis)* might be prevented by cleanſing and purifying the clothes, furniture, and apartments of perſons attacked by this diſeaſe,—and by removing them from ſituations where, if they remain, the infection of others is inevitable."

The motion being ſeconded, the reſolution was unanimouſly agreed to. Lord Sheffield then moved the ſecond reſolution.

"That a Subſcription be immediately ſet on foot, for the purpoſe of forming an Inſtitution for checking the progreſs of the CONTAGIOUS MALIGNANT FEVER in the metropolis, and for removing the cauſes of Infection from the dwellings of the Poor, upon a plan ſimilar to that which has been adopted with great ſucceſs and effect at Mancheſter."

Mr. Bernard ſeconded the motion, and ſaid, that he conſidered the ſucceſs of the meaſure not as a matter of ſpeculation or mere probability, but that it might be anticipated with perfect confidence and certainty. He had repeatedly witneſſed the benefits produced by the Inſtitution at Mancheſter, and he truſted that the time had now arrived when the noble example of that populous town would be effectually followed by the metropolis. He then entered into a ſhort account of the various advantages which had reſulted from the eſtabliſhment of the Houſe of Recovery there, and concluded by repeating, that the meaſure had his decided approbation.

This and the three following reſolutions were then unanimouſly adopted.

"That a Committee of five perſons be appointed to prepare a Plan for the Inſtitution, and to call a meeting of the Subſcribers, in order to lay the ſame before them for their conſideration.

"That the ſaid Committee do conſiſt of the Biſhop of Durham, Dr. Garthſhore, Dr. Wilian, W. Waddington, Eſq. and Thomas Bernard, Eſq.

"That the ſaid Committee be authorized to open accounts at ſuch bankers in the metropolis as they ſhall engage to receive ſubſcriptions."

A ſubſcription was then entered into, and amounted to nearly 600l. and the meeting was adjourned until the Committee ſhall have

have prepared a Plan for the Inſtitution. Among the firſt contributors were, the Ducheſs of Glouceſter, the Duke of Somerſet, the Earl of Pomfret, the Biſhops of London and Durham, Lord de Dunſtanville, Lord Carrington, Lord Sheffield, Mr. Bernard, Mr. Morton Pitt, and Mr. Wilberforce; and we are happy to hear that the liſt of Subſcribers has ſince received very conſiderable additions.

Dr. DENNISON and Dr. SQUIRE will begin early in next month a Summer Courſe of Lectures on the Theory and Practice of Midwifery, and the Diſeaſes of Women and Children.

ERRATA.

Page 439, line 30, For "the experience under *this* conſideration," read the experience under conſideration.

Page 441, line 9, For "*attempted* with doubt," read *attempered* with doubt.

END OF VOL. V.

Advertiſement to the Medical World.

THE Proprietors of the periodical Work, entitled THE LONDON MEDICAL REVIEW and MAGAZINE, having determined in future to confine the object of that work *ſolely* to a full and comprehenſive Analyſis of NEW MEDICAL BOOKS, domeſtic and foreign; and having agreed to recommend their friendly Correſpondents to tranſmit their future communications to the MEDICAL and PHYSICAL JOURNAL, the Editors of the latter work announce this new and improved arrangement with much ſatisfaction, and earneſtly invite the Correſpondents of the London Medical Review and Magazine to honour them with their communications; aſſuring them, that they will on all occaſions be treated with due reſpect and diſtinction.

The Editors of the MEDICAL and PHYSICAL JOURNAL take this opportunity to repeat their acknowledgements to the medical world, for the continued and increaſed ſupport with

with which their exertions have been attended; and as THE MEDICAL and PHYSICAL JOURNAL will continue to be carried on *precisely upon the same plan, and with the same spirit as heretofore*, the Editors venture to promiſe their readers a conſiderable addition to the value of this work, from the acquiſition of the correſpondence which has hitherto been peculiar to the LONDON MEDICAL REVIEW and MAGAZINE.

This laſt mentioned work will in future be publiſhed as uſual, on the firſt day of every month, under the title of the LONDON MEDICAL REVIEW, and will recommend itſelf to a continuance of the patronage it has been honoured with, by the copiouſneſs and the independence of its criticiſms on every new publication which is connected with the ſtudies or purſuits of medical men. The plan of this work being, therefore, wholly different from that of the Medical and Phyſical Journal, the profeſſional reader will be able to indulge his peculiar views in the purchaſe of a periodical medical work, at half the previous expence. Thoſe who are in queſt of new facts, obſervations, experiments, and caſes, will conſult the MEDICAL and PHYSICAL JOURNAL, in which they will alſo meet with a Retroſpect neceſſarily brief, of all the novelties in medical literature; and thoſe who would enter more at large into the critical diſcuſſion and hiſtory of the practice of medicine, and its collateral ſciences, will probably feel a ſtrong intereſt in the peruſal of the LONDON MEDICAL REVIEW. Many gentlemen, who, not regarding the expence, determine to gratify themſelves by reading both works, will hav the advantage, in conſequence of this arrangement, of not purchaſing the ſame intelligence twice over. In every point of view, the Editors of both works conſider the arrangement they have adopted as matter of congratulation to their friends and correſpondents, and they hope the public at large will be of the ſame opinion,

London, April 25, 1801.

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